SIEMENS

INNOVATION WALL

Overview of **4,823 patents**

Patent number	Title
CN 114556070 B	旋转机器的状况监测的方法、计算机程序、数据处理系统
US 12,105,749 B2	Method for generating triples from log entries
CN 113632024 B	上级机器平台上的虚拟传感器
EP 4 373 227 B1	AUTOMATION ASSEMBLY WITH AN ADAPTER
US 12,241,510 B2	Compensating coupling
CN 115220710 B	用于为工业领域生成工程程序的方法和系统
US 11,901,147 B1	Solid-state circuit breaker that turns off electronics before primary main contacts are opened
US 11,789,799 B2	Protection against internal faults in burners
CN 114930256 B	用于在过程控制工厂中管理结晶过程的系统和方法
CN 112512857 B	一种轨道车辆
EP 4 094 281 B1	DISCONNECTING DEVICE AND PROTECTIVE-GAS-INSULATED MEDIUM-VOLTAGE POWER SWITCHGEAR
CA 3110226 C	OVERSPEED PROTECTION FOR A MOTOR OF A GATE CROSSING MECHANISM
EP 4 022 487 B1	OBJECT DESIGN PROCESSING USING COARSE GEOMETRIC ELEMENTS AND HIGH-RESOLUTION LATTICE ELEMENTS
US 12,383,999 B2	Operating facility for a CNC control system for controlling a machine tool with a rotary controller
US 12,352,757 B2	Pseudo-electropherogram construction from peptide level mass spectrometry data
CN 115191107 B	用于检测通信网络中的数据流量的方法和系统
EP 3 963 447 B1	SUPERVISORY DEVICE WITH DEPLOYED INDEPENDENT APPLICATION CONTAINERS FOR AUTOMATION CONTROL PROGRAMS
US 12,111,961 B2	Secure data extraction from computing devices using unidirectional communication
EP 3 865 343 B1	PASSENGER TRANSPORT VEHICLE WITH AT LEAST ONE HOLDING BAR
CN 111563588 B	编码场景和任务相关学习信息及传输到可传输神经网络层
CN 112805637 B	驱动设备的设计、配置和维护
EP 3 457 240 B1	METHOD AND SYSTEM FOR AUTOMATICALLY GENERATING INTERACTIVE WIRING DIAGRAM IN AN INDUSTRIAL AUTOMATION ENVIRONMENT
EP 4 244 543 B1	METHOD AND ARRANGEMENT FOR ADJUSTING A ROOM CLIMATE WITH AIR CONDITIONING PREFERENCES OF USERS
EP 3 886 133 B1	INTERLINK ARRANGEMENT FOR A SWITCHING DEVICE
KR 102917741 B1	타깃 검출 방법 및 장치, 전자 디바이스, 및 컴퓨터 저장 매체
AU 2022357161 B2	METHOD AND SYSTEMS FOR DETERMINING A MEASUREMENT ERROR IN A MEASUREMENT OF HYDROGEN CONCENTRATION
CH 718978 B1	Brand- und Rauchschutzklappe mit Selbsteinzug sowie zugehörige Anordnung mit einem Stellantrieb.
EP 3 959 045 B1	METHOD FOR DYNAMIC MULTI-DIMENSIONAL SPATIO-TEMPORAL HUMAN MACHINE INTERACTION AND FEEDBACK
DE 10 2017 214 927 B4	Kraftfahrzeug, Stromabnehmer und Verfahren zum Betrieb eines Kraftfahrzeugs
EP 4 332 699 B1	OPERATOR-SUPPORTING CONTROL SYSTEM FOR A TECHNICAL INSTALLATION AND OPERATING METHOD
DE 10 2022 208 366 B3	Verbinder für einen Leistungsschalter und ein nachgelagertes Schütz, Abzweig mit solch einem Verbinder und Anordnung mit solch einem Abzweig
DE 10 2024 208 020 B3	Herstellen einer Vakuumschaltröhre
US 12,046,951 B2	Method for producing a magnetic material layer
US 12,644,737 B2	Electromagnetic flowmeter with primary and secondary pairs of coils
US 11,886,779 B2	Accelerated simulation setup process using prior knowledge extraction for problem matching
CN 114981735 B	用于具有证书管理的技术设备的控制系统
CN 110988577 B	电容极性反接检测方法、装置和计算机可读介质
EP 4 279 435 B1	OPERATING METHOD FOR A LOADING SYSTEM AND AUTOMATION SYSTEM FOR CONTROLLING A LOADING SYSTEM
CN 112241364 B	用于为计算机控制的组件提供应用的方法和系统
US 12,576,723 B2	Electrical contacting apparatus for a current collector of a vehicle, current collector and vehicle
US 11,845,477 B2	Bogie of a rail vehicle

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,790,135 B2	Method and systems for provision of a simulation model of an electric rotating machine
EP 4 179 479 B1	PARAMETER OPTIMIZATION METHOD, DEVICE, AND STORAGE MEDIUM
EP 3 772 796 B1	BUSBAR HOLDER AND INSTALLATION DISTRIBUTOR
IN 462630 B	DYNAMIC POWER HARVESTING SYSTEM
DE 10 2024 208 142 B4	Photovoltaikumrichter mit selektiver Abschaltung bei Auftreten eines Lichtbogenereignisses und eine Photovoltaikanordnung mit einem solchen Photovoltaikumrichter
CN 110773898 B	开关装置的焊接定位组件及焊接装置
CN 114603369 B	数控机床转台系统控制方法、数控系统和计算机可读介质
US 11,874,654 B2	System, apparatus and method of condition based management of one or more electro-mechanical systems
US 12,626,223 B2	Method and system for allocating an AGV vehicle in a plant location
CN 115668126 B	图形化编程方法和处理器、终端及计算机程序产品
CN 114603404 B	工件的磨削方法、装置和计算机可读介质
US 12,389,465 B2	Method for establishing a wireless data connection between a vehicle and an external unit, connection establishment unit and vehicle
US 12,248,362 B2	Method for recording a number of events in an encoded tracer variable in a security-oriented computer program
CN 112903548 B	对烟雾事件的识别和电子束熔炼设备
US 12,548,426 B2	Crossing gate mechanism with integrated maintenance status alarm
DE 10 2021 208 400 B4	Vakuumschaltanordnung und Verfahren zum Trennen verschweißter Kontakte einer Vakuumschaltanordnung
US 12,684,310 B2	Method and arrangement for the representation of technical objects
CN 114455335 B	叠放箱体的分离装置和方法
DE 10 2017 101 738 B4	Antriebsvorrichtung
EP 4 139 759 B1	OPTIMAL TOOL CONFIGURATION FOR MANUFACTURING A WORKPIECE
CN 113439424 B	建立具有包括可调数量的事务区块和多个中间区块的区块的区块链
EP 4 427 128 B1	DEVELOPING AN APP, ESPECIALLY UPDATING A WORKFLOW OF THE APP
CN 114341896 B	用于检测过滤器脏污程度的系统和方法
US 12,651,714 B2	Circuit breaker and method
IN 470410 B	MONITORING DEVICE AND METHOD FOR MONITORING A SYSTEM
US 11,928,007 B2	Monitoring processors operating in lockstep
CN 113795992 B	直流电网中的接地故障的定位
CN 114746818 B	用于将数据从工业工厂的内部数据处理系统提供给外部数据处理系统的方法和系统
US 12,593,729 B2	Power module having at least three power units
EP 3 637 211 B1	METHOD FOR OPERATING AN INSTALLATION AND INSTALLATION
EP 3 683 118 B1	METHOD FOR MONITORING THE ORIENTATION AND/OR THE VISIBILITY OF A SIGNAL LIGHT POINT FOR RAIL TRAFFIC
US 11,876,440 B2	Fault-tolerant operation of a current converter
US 12,259,702 B2	System and method for administration of drive components
EP 4 081 926 B1	AUTOMATIC SIMPLIFICATION OF A RIGID-BODY SIMULATION
US 12,611,956 B2	Method and arrangement for protecting a charging station against improper use
AU 2025204367 B2	System and method for automatically checking an integrity of a guided vehicle
CN 115684961 B	用于确定电池储能器的容量损失的方法、装置及计算机程序产品
EP 4 126 633 B1	METHOD FOR MONITORING THE POSITION OF A PARKED RAIL VEHICLE, AND COMPUTER PROGRAM, IN PARTICULAR FOR A TRAIN SAFETY SYSTEM
CN 114175220 B	用于热喷涂导体线路的方法和电子模块
CN 113518678 B	叠片铁芯及其制造方法
EP 3 910 986 B1	METHOD OF DETECTING AN INTERFERENCE SOURCE IN AN INDUSTRIAL FACILITY
EP 4 381 407 B1	ENCODING OF PROGRAM INSTRUCTIONS ON A NUMERICAL CONTROL DEVICE
JP 7467660 B2	産業用オートメーションプラットフォームのオートメーションプログラムを管理する方法および装置
EP 4 057 492 B1	CONFIGURABLE POWER CONVERTER FOR CHARGING AN ELECTRIC VEHICLE
US 11,952,025 B2	Method for configuration of control software in a rail vehicle
CN 114641735 B	用于管理驱动组件的系统和方法
CN 114761182 B	机器人控制系统和用于训练所述机器人控制系统的方法
EP 4 105 555 B1	GAS VALVE ASSEMBLY
US 12,265,548 B2	Method and system for restoring consistency of a digital twin database
CN 109991938 B	可移动工作站加入产品线的方法、装置、系统和介质

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
JP 7597834 B2	少なくとも３つの電力ユニットを備えた電力モジュール
EP 4 186 094 B1	COOLING ARRANGEMENT AND MOTOR MODULE
US 12,115,680 B2	Computerized engineering tool and methodology to develop neural skills for a robotics system
EP 3 961 841 B1	POWER MANAGEMENT METHOD AND APPARATUS, COMPUTING DEVICE, MEDIUM, AND PRODUCT
CN 113424488 B	用于为数字密钥对提供来源证明的方法
CN 113497575 B	确定供电系统中发电机状态的方法、装置和供电系统
KR 102653766 B1	스위칭 멤버를 자동으로 테스트하기 위한 방법 및 장치
CN 111819564 B	用于自动工作指令创建的方法和系统
US 12,553,779 B2	Self-monitoring sensor
US 12,189,825 B2	Method for identifying and verifying control software of a rail vehicle
US 12,587,183 B2	Solid-state aided airgap for dc circuit breakers
GB 2630690 B	Live-tank outdoor vacuum circuit breaker (OVCB) apparatus
US 12,573,567 B2	Semiconductor-based DC transfer switch
US 11,979,024 B2	Power distribution virtual networking
EP 4 152 539 B1	ARRANGEMENT AND METHOD FOR A LOW VOLTAGE ALTERNATING CURRENT CIRCUIT
CN 114650961 B	控制起重机的方法、装置和系统以及存储介质
CN 115885468 B	用于机器的基于软件的状况监测
EP 3 594 767 B1	ABSTRACTION LAYERS FOR AUTOMATION APPLICATIONS
DE 10 2023 213 349 B4	Bemessungsstrommodul
CN 115428402 B	用于数据传输的方法和通信系统
US 12,126,690 B2	Communication of a remote terminal unit based on a module type package
CN 113366441 B	用于计算机辅助技术应用的自适应用户界面
JP 7379672 B2	フレキシブル生産システムおよび装置のための自己学習型製造スケジューリング方法
AU 2023332994 B2	MANAGING DATA TRANSMISSION FROM A PLURALITY OF TELEMETRY DEVICES ONBOARD TRAINS
EP 4 295 470 B1	ROTOR WITH PERMANENT MAGNETS
EP 4 176 459 B1	OPERATOR-INDEPENDENT COMPACT SPRING-ACTION SWITCHING MECHANISM AND ELECTROMECHANICAL PROTECTIVE SWITCHING DEVICE
EP 4 565 926 B1	METHOD FOR OPERATING A DRIVE SYSTEM, COMPUTER PROGRAM PRODUCT, CONTROL UNIT AND INDUSTRIAL APPLICATION
EP 3 978 770 B1	DAMPER ROTARY DRIVE AND AXLE HOUSING FOR A DAMPER ROTARY DRIVE
US 11,934,825 B2	Event-driven design simulation
US 11,888,407 B2	Power module having at least two power semiconductor arrangements that are contacted on a substrate
US 12,147,219 B2	Control system and operator server for establishing dependencies between process objects
EP 4 266 623 B1	DELETING TRANSACTIONS FROM A DISTRIBUTED LEDGER
US 11,994,978 B2	Automated verification of a test model for a plurality of defined BDD test scenarios
CN 115668133 B	用于工业应用包管理的系统
EP 3 647 943 B1	METHOD FOR DETERMINING AT LEAST ONE CHARACTERISTIC OF AT LEAST A CHANGE
AU 2020354322 B2	Method for monitoring functions of a balise and reader suitable therefor
EP 3 732 868 B1	METHOD FOR SECURING AN AUTOMATION COMPONENT
US 12,091,067 B2	Operating method for vehicles with the forming or configuring of a communications connection after the coupling process
EP 4 370 984 B1	INDUSTRIAL DATA INTEGRATION DEVICE, METHOD AND COMPUTER READABLE STORAGE MEDIUM
EP 4 291 863 B1	TEMPERATURE MONITORING FOR SWITCHGEAR
AT 528406 B1	Wankstabilisator
CN 117163563 B	送料控制参数确定及送料控制方法、装置、系统及控制器
CN 111814791 B	识别系统图中元器件的方法和装置
IN 464258 B	SYSTEM AND METHOD FOR THE SUPRAREGIONAL OPERATION OF A VEHICLE
US 12,131,621 B2	Method for automatic identification of fire detectors
US 12,322,951 B2	Circuit breaker device and method
AT 527531 B1	Verfahren und System zur Diagnose und/oder Überwachung für Schienenfahrzeuge
CN 116766300 B	切割机构的控制方法
US 12,051,908 B2	Device and method for controlling energy flows between components of an energy system
US 12,170,711 B2	Method and system for transmitting software artifacts from a source network to a target network
CN 113795994 B	直流网络
EP 3 959 498 B1	ACOUSTIC ANALYSIS OF A CONDITION OF A MACHINE

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 227 800 B1	COMPUTER-IMPLEMENTED METHOD FOR VERIFYING A PLURALITY OF COMMITS
CN 112292695 B	计算机执行的方法、计算机程序产品和计算机可读介质
US 12,013,769 B2	Hot-standby redundancy control system, method, control apparatus, and computer readable storage medium
EP 3 768 448 B1	METHOD FOR DETERMINING BUILDING REGULATIONS FOR AN ADDITIVE PRODUCTION METHOD, METHOD FOR CREATING A DATABASE WITH CORRECTIVE MEASURES FOR THE MANAGEMENT OF AN ADDITIVES PRODUCTION PROCESS, STORAGE FORMAT FOR BUILDING INSTRUCTIONS AND A COMPUTER PROGRAM PRODUCT
BR 112022023395 B1	MÉTODO PARA DAR PARTIDA E PARAR UM MOTOR ASSÍNCRONO, MOTOR DE ARRANQUE SUAVE, E, MEIO LEGÍVEL POR COMPUTADOR
EP 4 269 000 B1	MAGNETIC SHEET CREATED THROUGH ADDITIVE MANUFACTURE, LAMINATED CORE AND ELECTRIC MACHINE
CN 117794832 B	用于自动定向产品容器的系统和方法
US 12,253,996 B2	Method and system for automated column type annotation
CN 114815749 B	客户端负荷减少的反向注释
EP 4 143 070 B1	ARRANGEMENT FOR A RAIL VEHICLE
CN 114474967 B	丝网印刷机控制方法、装置、电子设备和存储介质
US 11,982,628 B2	System and method for detecting defects on imaged items
CA 3113489 C	CAMERA SYSTEM AND METHOD FOR MONITORING AN INSTALLATION, IN PARTICULAR SWITCHGEAR
CN 112041949 B	感应器装配件
US 12,547,159 B2	Computer-implemented method for determining an optimum assignment of module types to an assembly line selected with regard to its assembly capacity
IN 580337 B	CIRCUIT ARRANGEMENT FOR A CURRENT CONVERTER
EP 3 743 250 B1	REINFORCEMENT LEARNING FOR CONTACT-RICH TASKS IN AUTOMATION SYSTEMS
US 12,005,938 B2	Catching device for a shunt coupling
CN 114564798 B	线缆排线的控制方法、装置和计算机可读介质
EP 4 205 154 B1	A CONTACT FOR A VACUUM SWITCHING TUBE AND METHOD OF MANUFACTURING SAME
EP 4 022 488 B1	SEMICONDUCTOR LAYOUT CONTEXT AROUND A POINT OF INTEREST
EP 3 673 337 B1	SYSTEM, METHOD AND CONTROL UNIT FOR DIAGNOSIS AND LIFE PREDICTION OF ONE OR MORE ELECTRO-MECHANICAL SYSTEMS
EP 3 560 792 B1	METHOD FOR OPERATING A RAILWAY SAFETY SYSTEM
BR 102022004708 B1	MÉTODO PARA AUTENTICAR NÓS, NÓ PARA CONEXÃO A UMA REDE DE COMUNICAÇÃO, E, REDE DE COMUNICAÇÃO
US 12,506,614 B2	Detecting manipulated clients in a control system
EP 3 969 351 B1	ODOMETRIC METHOD, IN PARTICULAR FOR A RAIL VEHICLE OR A CONTROL CENTER
EP 3 713 809 B1	METHOD AND DEVICE FOR MONITORING A HAZARD ZONE OF A LEVEL CROSSING
CN 111448654 B	用于电子部件的散热器、具有这种散热器的电子组件和制造这种散热器的方法
EP 4 162 600 B1	SOFTWARE BASED CONDITION MONITORING FOR MACHINES
AU 2021256261 B2	Controlling a heat network
EP 3 907 672 B1	DISTRIBUTING ORDER EXECUTION IN A MOM SYSTEM
EP 4 427 115 B1	INDUSTRIAL PERSONAL COMPUTER
DE 10 2018 215 044 B4	Anbauelement für elektrische Mittelspannungsanlagen mit kombinierten Ableiter und Spannungssensor und eine Mittelspannungsanlage mit einem solchen Anbauelement
EP 4 371 845 B1	AIR CONDITIONING SYSTEM
EP 4 572 994 B1	METHOD FOR CREATING A TRAIN CONTROLLER
EP 3 931 644 B1	METHOD FOR TESTING OF A SYSTEM CONTROL AND SIMULATION DEVICE
CA 3135171 C	SYSTEM AND METHOD FOR CONFIGURING AND MANAGING FIELD DEVICES OF A BUILDING
IN 547341 B	TRANSMISSION DEVICE FOR TRANSMITTING DATA
CN 116072946 B	Z型叠片机的隔膜放卷电机的控制方法及Z型叠片机
IN 587399 B	VERIFICATION OF SAFETY-RELEVANT PARAMETER VALUES
CN 114912458 B	一种情感分析方法、装置和计算机可读介质
SA 14851 B1	نظام تحكم في الإضاءة يمكن لجهاز تحكم القيام بتهيئته
US 12,572,701 B2	Path-based layer stack connectivity check for plasma induced damage avoidance
GB 2632406 B	Railway control systems
EP 3 776 117 B1	COMPREHENSIVE FAULT ANALYSIS FOR CONTROL DEVICES AND INDUSTRIAL TECHNICAL INSTALLATIONS
US 11,971,808 B2	Generation of test models from behavior driven development scenarios based on behavior driven development step definitions and similarity analysis using neuro linguistic programming and machine learning mechanisms
JP 7524356 B2	ハードウェアベースのセンサ分析
CN 116710668 B	用于监视将第一轴与第二轴联接的联轴器的装置

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,197,535 B2	Determining a denoised named entity recognition model and a denoised relation extraction model
IN 491203 B	DATA PROCESSING DEVICE FOR PROCESSING A RADIO SIGNAL
CN 111090922 B	对用于多个工业单元的协作机器人编程的方法和系统
EP 3 949 449 B1	AUTHENTICATION METHOD AND APPARATUS
CN 114846777 B	用于在工业网络中提供冗余的网络设备
SA 15131 B1	راعشإ زاهج ةرئاد ياي ةرادإل ةقيرطو مظنا
US 11,913,999 B2	Detection of a ground fault in a direct-current network
IN 546055 B	ASSEMBLY AND METHOD FOR PREDICTING THE REMAINING SERVICE LIFE OF A MACHINE
CN 115210837 B	用于中压的开关装置
IN 513770 B	METHOD AND TRANSMISSION DEVICE FOR DATA TRANSMISSION BETWEEN TWO OR MORE NETWORKS
AT 523981 B1	Verfahren zur Desinfektion eines Passagierraums eines Verkehrsmittels
CN 115176427 B	经由传送时间关键数据的通信网络将控制应用同步的方法、网络基建设备和通信终端设备
US 12,530,010 B2	Compensation of tool deflection by dynamically adjusting the tool geometry
DE 10 2020 204 513 B4	Beleuchtungsverfahren und -vorrichtung
US 11,991,189 B2	Intrusion detection for computer systems
DE 10 2024 211 379 B3	Verfahren und Einrichtung zum Betreiben eines Fahrzeugs während eines Bergungsbetriebs
US 12,620,541 B2	Insulating-material housing and compact circuit breaker
EP 4 154 027 B1	MACHINE CONDITION MONITORING METHOD AND SYSTEM
US 12,688,027 B2	Zero-downtime upgrades of containerized programmable logic controller (plc) automation functions
DE 10 2023 204 776 B4	Fernantrieb für einen elektrischen Schalter und elektrischer Schalter mit solch einem Fernantrieb
EP 4 254 233 B1	METHOD AND SYSTEM FOR SECURE EXECUTION OF CONTROL APPLICATIONS, HOST
EP 4 472 687 B1	APATHOGENIC COATING OF AN OBJECT, OBJECT WITH THE APATHOGENIC COATING AND METHOD FOR PLACING AN APATHOGENIC COATING ON AN OBJECT
EP 4 392 755 B1	METHOD AND TEST ARRANGEMENT FOR TESTING AN AIR-CONDITIONING UNIT
EP 4 211 719 B1	SEMICONDUCTOR MODULE WITH AT LEAST ONE SEMICONDUCTOR ELEMENT
US 11,923,674 B2	Method and apparatus for controlling solid state circuit breaker, and solid state circuit breaker
EP 3 539 845 B1	SWITCHABLE CONNECTION OF A POSITIONING MODULE TO TWO SIGNAL BOX INSTANCES
US 12,537,456 B2	Bi-directional power converter
US 11,834,080 B2	Comfort ventilation for a sanitary module for a vehicle
DE 10 2023 200 524 B3	Anschlussklemme und Reiheneinbaugerät
EP 3 652 657 B1	DEVICE AND METHOD FOR COUPLING A MACHINE WITH A PLURALITY OF APPLICATIONS
CN 111771202 B	用于对技术系统的计算机辅助设计的方法和装置
EP 3 770 785 B1	METHOD FOR DETECTING BAD DATA INJECTIONS ATTACKS IN AN INDUSTIAL CONTROL SYSTEM
EP 4 507 463 B1	AUTOMATION DEVICE WITH COOLING BODY
US 12,550,306 B2	Separation positioning mechanism and robot positioning system
CN 115190976 B	元件、功能模块和系统的剩余寿命评估方法、装置和系统
CN 112534880 B	利用扩展的网络接入标识符将网络组件与网络、特别是移动无线电网络连接的计算机实现的方法和网络接入服务器
CN 116194354 B	用于道岔转辙机的锁闭装置和锁闭方法以及道岔转辙机
US 12,444,552 B2	Circuit breaker device and method
EP 4 297 486 B1	METHOD FOR HANDOVER OF USER EQUIPMENT ONBOARD A VEHICLE
GB 2607724 B	Foundation for equipment enclosure
KR 102698815 B1	3-레벨 ANPC(Active Neutral-Point-Clamped) 하이브리드 컨버터
EP 3 838 709 B1	METHOD FOR TRANSFERRING TELEGRAMS FROM A CENTRAL UNIT TO A VEHICLE AND CENTRAL UNIT
CN 112470387 B	直流变换器及其运行
IN 492163 B	METHOD AND DEVICE FOR LOCATING FAULT POINT IN AREA NETWORK BASED ON TRAVELING WAVE
EP 4 150 423 B1	ADAPTATION OF FAIL-SAFE MONITORING IN AN INDUSTRIAL AUTOMATION SYSTEM
CN 115272640 B	MTMCT系统，信息交换方法、装置和可读介质
IN 535482 B	COLLISION-FREE GUIDANCE OF A LOAD SUSPENDED FROM A CABLE
CN 112602253 B	单齿段
US 11,841,698 B2	Arrangement and method for secure execution of an automation program in a cloud computing environment
US 12,065,180 B2	Adaptor assembly for a gate mechanism
CN 115765906 B	用于确定时间戳的方法、装置与继电保护装置
EP 4 508 732 B1	CONTROL DESIGN FOR A PHOTOVOLTAIC SYSTEM IN GRID- FORMING OPERATION FOR POWER GRID SUPPORT

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 058 934 B1	METHOD AND APPARATUS FOR PRODUCT QUALITY INSPECTION
IN 499521 B	CURRENT COLLECTOR AND NON-TRACK-BOUND, ELECTRICALLY DRIVEN VEHICLE WITH A CURRENT COLLECTOR OF THIS KIND
CN 114341859 B	使用粗略几何单元和高分辨率网格单元的对象设计处理
AU 2023423084 B2	SYSTEM FOR DIAGNOSING WHEEL SET BEARINGS
KR 102920579 B1	기계 상태 모니터링 방법 및 기계 상태 모니터링 시스템
EP 4 213 091 B1	PHYSICS-INFORMED ANOMALY DETECTION IN FORMED METAL PARTS
DE 10 2022 212 200 B4	Verdrahtungsmodul zur internen Kontaktierung eines Hilfsschalters, Verdrahtungssystem und Verfahren zum elektrischen Kontaktieren eines solchen Verdrahtungsmoduls
US 12,651,991 B2	Arrangement and method for determining the operational performance of a rotating electric machine
DE 10 2021 210 270 B4	Vakuumschalteinrichtung
EP 4 179 558 B1	OVERLOAD CURRENT DETECTION IN A CIRCUIT INTERRUPTING DEVICE
US 12,411,483 B2	Method and system for diagnosing messages
US 12,266,464 B2	Magnetic sheet stack, method for manufacturing a magnetic sheet stack and electric machine
CN 113805883 B	创建应用程序的方法和系统
EP 3 891 566 B1	METHOD FOR OPERATING A NUMERICALLY CONTROLLED PRODUCTION MACHINE AND A CORRESPONDING NUMERICAL CONTROLLER
IN 580323 B	PROGRAMMABLE LOGIC CONTROLLER-BASED MODULAR ACCELERATION MODULE FOR ARTIFICIAL INTELLIGENCE
US 12,139,020 B2	Device and method for supplying energy to a sensor device in a rail vehicle
DE 10 2023 207 065 B3	Schalter mit Differenzstromüberwachung sowie Schaltschrank und Differenzstromüberwachungssystem mit einem solchen Schalter
EP 4 244 637 B1	ARC FAULT DETECTION BY ACCUMULATION OF MACHINE LEARNING CLASSIFICATIONS IN A CIRCUIT BREAKER
CN 112912881 B	用于将密钥数据存储在电子构件中的方法
CN 116034340 B	用于协议处理的方法及系统
CA 3189022 C	SYSTEM AND METHOD FOR TRACKING LOW POWERED BEACON TAGS
US 12,669,804 B2	Apparatus, automation system and method for coupling a device network and a communication network
EP 4 367 564 B1	SYSTEM, METHOD AND STORAGE MEDIUM FOR PRODUCTION SYSTEM AUTOMATIC CONTROL
EP 4 091 113 B1	METHOD AND SYSTEM FOR SECURING ASSET DATA IN A COMPUTING ENVIRONMENT
CN 114270631 B	电路板连接结构
IN 508261 B	METHOD FOR IDENTIFYING CHARACTERISTICS OF A RAIL VEHICLE AND AN APPARATUS SUITABLE FOR IMPLEMENTING THE METHOD
EP 4 256 489 B1	METHOD AND SYSTEM FOR DYNAMICALLY RECOMMENDING COMMANDS FOR PERFORMING A PRODUCT DATA MANAGEMENT OPERATION
CN 115319779 B	夹爪装置及散热器抓取组件
US 12,476,553 B2	Charging current method, charging current device, and electronic converter with the charging current device
US 12,352,684 B2	Damper torque or valve force testing device
EP 4 014 111 B1	METHOD AND DEVICE FOR SUPPORTING A ROBOTIC PROCESS AUTOMATION
US 12,208,660 B2	Air-conditioning arrangement for an interior of a vehicle
US 12,687,830 B2	Process control system, apparatus and method for control of a process plant
CN 119104201 B	用于具有有效压力线路的流量测量设备的诊断方法
US 12,190,162 B2	Optimized allocation of resources to nodes of an automation system based on monte carlo simulation
KR 102834900 B1	산업 자동화 플랫폼용 자동화 프로그램의 관리를 위한 방법 및 어셈블리
AT 528498 B1	Lagerkonsole, Fahrwerk, Wagenkasten und Schienenfahrzeug
EP 4 122 226 B1	CLOCK DOMAIN TRANSLATION FOR NON-SYNCHRONIZED SENSORS
US 12,245,259 B2	Interference reduction in telecommunication networks
CN 113196440 B	具有集成的测量功能的熔断保险装置以及保险体
IN 507304 B	VEHICLE HAVING A DETECTION DEVICE FOR DETECTING A ROUTE-SIDE TRANSMITTER DEVICE AND METHOD FOR OPERATING SAME
CN 112970184 B	直流开关
TW I920623 B	閥門執行器
JP 7577894 B2	フロー制御環境を用いてタイムクリティカルなサービスを提供するための方法およびシステム
US 11,790,559 B2	Data compression for multidimensional time series data
US 12,353,188 B2	System and method of monitoring a cyclically operating manufacturing device
EP 4 388 609 B1	BATTERY PRODUCTION PLANT, METHOD FOR DETERMINING CONTROLLABLE PROCESS PARAMETERS FOR A BATTERY PRODUCTION PLANT AND METHOD FOR OPERATING A BATTERY PRODUCTION PLANT

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 876 358 B1	INDISCRETE CONTACT ARRANGEMENT BETWEEN A POWER RAIL ARRANGEMENT OF A POWER SUPPLY AND A SOCKET OF A CONSUMER
CN 115244853 B	用于操控功率半导体开关的方法、用于功率半导体开关的操控电路以及电子保护开关
EP 3 583 502 B1	UNIVERSAL DATA ACCESS ACROSS DEVICES
US 12,476,799 B2	Constrained operation of a field device
JP 7532681 B2	未知の安全でないシナリオの生成、自動運転車の改善、コンピュータシステム
EP 3 871 113 B1	METHOD AND APPARATUS FOR CLASSIFYING DATA
US 11,876,365 B2	Connecting a load to a direct current network
EP 3 711 274 B1	MESSAGE QUEUING TELEMETRY TRANSPORT (MQTT) DATA TRANSMISSION METHOD, APPARATUS, AND SYSTEM
CN 114047419 B	可控硅检测仪及可控硅性能检测方法
US 11,770,315 B2	Artificial intelligence based device identification
EP 4 091 050 B1	METHOD AND ASSEMBLY FOR MANAGING AUTOMATION PROGRAMS FOR INDUSTRIAL AUTOMATION PLATFORMS
US 12,234,136 B2	Device for stabilizing telescopic scissors with a plurality of traction parts
EP 4 142 234 B1	COMMUNICATION INTERWORKING BETWEEN A CLIENT-SERVER ARCHITECTURE AND A PUBLISH-SUBSCRIBE SYSTEM
EP 4 436 857 B1	METHOD AND APPARATUS FOR MONITORING EQUIVALENT CONICITY OF A RAILWAY VEHICLE-RAIL SYSTEM
CN 115136485 B	用于将直流电转换为交流电的机械装置
US 12,091,051 B2	Generating unknown-unsafe scenarios, improving automated vehicles, and computer system
EP 3 832 414 B1	INDUSTRIAL PERSONAL COMPUTER FOR A REDUNDANT HOT STANDBY CONTROL SYSTEM, REDUNDANT HOT STANDBY METHOD AND COMPUTER-READABLE STORAGE MEDIUM
IN 516469 B	METHOD FOR TRANSFERRING DATA FROM A DEVICE TO A DATA MANAGEMENT MEANS SWITCHING UNIT DEVICE AND SYSTEM
US 12,206,241 B2	Redundant power supply, in particular for data centers, and method and computer program for the operation thereof
EP 4 063 169 B1	VEHICLE TRACTION SYSTEM
EP 4 176 501 B1	LOAD CENTER THAT REDUCES TRIP TIME DURING SHORT CIRCUIT FAULTS
EP 4 460 435 B1	BATTERY SYSTEM RACK AND METHOD FOR ACCOMMODATING AT LEAST ONE FIRST AND AT LEAST ONE ADJACENT SECOND BATTERY MODULE IN A VEHICLE IN ORDER TO FORM A BATTERY SYSTEM
KR 102757504 B1	배터리 저장 디바이스들의 잔존 가치를 결정하기 위한 방법, 장치 및 컴퓨터 프로그램 제품
US 12,547,156 B2	Method of production for tamper-proof machine components
US 12,050,440 B2	Machine control based on automated learning of subordinate control skills
CN 116153692 B	控制器及自动连接系统
CN 113454543 B	确定能量系统的热消耗的方法、能量管理系统及能量系统
US 12,393,169 B2	Method and apparatus for monitoring industrial devices
CN 115191025 B	用于制造功率模块单元的方法
US 12,395,095 B2	Commutation cell, flying capacitor module and multilevel converter
EP 3 726 373 B1	CREATING AN APP METHOD AND SYSTEM
EP 4 016 918 B1	METHOD FOR INITIAL DISTRIBUTION OF PROTECTED DATA IN AN ETCS TRAIN CONTROL SYSTEM
CN 115398442 B	用于评估传感器测量值的设备和自动化方法和该设备的应用
EP 4 158 610 B1	HARDWARE-BASED SENSOR ANALYSIS
US 12,155,644 B2	Authenticating a device in a communication network of an automation installation
CN 112544032 B	针对电源的输入电路
EP 4 140 103 B1	AN ENGINEERING SYSTEM AND METHOD OF ORCHESTRATING ENGINEERING SOFTWARE FOR A FACTORY AUTOMATION ENVIRONMENT
US 12,381,865 B2	Communication system, adapter for a terminal and method for securely transmitting time-critical data within the communication system
US 12,640,316 B2	Circuit breaker and method
CN 110221113 B	用于故障电流的设备和方法
US 12,411,685 B2	Computer-implemented method for verifying a plurality of commits
EP 4 033 218 B1	METHOD AND DEVICE FOR MONITORING THE OPERATION OF A TECHNICAL OBJECT
US 12,208,436 B2	Motion planning for a conveyor system of a servo press installation
US 12,645,208 B2	Method and system for controlling a production plant to manufacture a product
EP 4 063 229 B1	METHOD FOR OPTIMIZING RAIL TRAFFIC OF A RAIL TRAFFIC NETWORK
DE 10 2022 206 946 B3	Doppelstöckiges Schienenfahrzeug
CN 115152127 B	用于浸渍、强化或电绝缘承载单层或多层绕组主体的方法
EP 4 246 939 B1	SYSTEM AND METHOD FOR MANAGING CLIENT-SERVER COMMUNICATION

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115462054 B	通信转换方法、网关设备、网络系统和计算机介质
AT 528738 B1	Rampensystem eines Fahrzeugs
AT 527303 B1	Fahrwerk für ein Schienenfahrzeug und Schienenfahrzeug
CN 113767442 B	电动机、叠片铁芯及其制造方法
EP 3 971 662 B1	METHOD FOR OPERATING A REDUNDANT AUTOMATION SYSTEM
CN 108631204 B	用于开关柜活门机构的自锁装置及开关柜
EP 3 881 506 B1	METHOD FOR OPERATING A COMMUNICATION SYSTEM WITH REDUNDANT ROUTERS AND ROUTER
EP 4 220 979 B1	SYSTEM, APPARATUS, AND METHOD FOR INTELLIGENT SIGNAL ROUTING IN AN INDUSTRIAL COMMUNICATION NETWORK
US 12,130,843 B2	Device and method for preparing data
EP 4 377 787 B1	METHOD AND SYSTEM FOR GENERATING ENGINEERING PROGRAMS WHICH ARE COMPATIBLE WITH A SPECIFIC ENGINEERING ENVIRONMENT
US 12,126,468 B2	Switch for connecting field apparatuses and device for galvanically isolating at least one apparatus which is connectable to a 2-wire Ethernet bus system
EP 4 021 020 B1	TRAIN POSITIONING METHOD AND APPARATUS, SYSTEM, AND COMPUTER-READABLE MEDIUM
EP 4 455 954 B1	METHOD AND SYSTEM FOR BLOCK SCHEDULING FOR ELECTRIC VEHICLE WITH INTRADAY CHARGING
DE 10 2022 209 492 B3	Kühlkörper für ein Halbleiterschaltgerät sowie Halbleiterschaltgerät
EP 4 064 563 B1	ELECTRONIC SWITCH
EP 3 814 188 B1	EMERGENCY CATCH DEVICE
CN 115427968 B	边缘计算设备中的鲁棒人工智能推理
US 11,880,190 B2	Method and platform for deployment of an industrial application on an edge computing device of a machine tool
EP 4 494 122 B1	FIRE DETECTOR WITH UNHEATED THERMISTORS, IN PARTICULAR NTCS, FOR DETECTING THERMAL FLUCTUATIONS IN THE AREA OF THE INLET OPENINGS AND CORRESPONDING METHOD
EP 4 341 146 B1	SIDE WALL FOR A RAIL VEHICLE
EP 3 931 851 B1	HYBRID CIRCUIT BREAKER, HYBRID CIRCUIT BREAKING SYSTEM, AND CIRCUIT BREAKING METHOD
US 12,151,724 B2	Displaying a graphical representation of information by means of multiple sub-displays
US 11,977,558 B2	Device and method for coupling a machine to a plurality of applications
AU 2020410114 B2	Transmission device for transmitting data
US 11,900,247 B2	Solar irradiation prediction using deep learning with end-to-end training
US 12,506,593 B2	Method and arrangement for the secure transmission of a message from a transmitter to a receiver
CN 116781770 B	通信建立方法、装置、电子设备和存储介质
US 12,272,241 B2	Artificial intelligence for responsive operation for vehicle fleet management and method thereof
US 11,799,724 B2	Internet-of-things model-based virtual internet-of-things device generation method and apparatus
CN 113571354 B	电气开关的摇转杆、闭锁装置和电气开关
CN 115885252 B	对与设备的固件单元相关联的软件模块进行编程的方法
EP 3 906 178 B1	METHOD AND ARRANGEMENT FOR PROTECTING A CHARGING STATION AGAINST IMPROPER USE
US 11,837,420 B2	Arc extinguishing systems
EP 3 964 847 B1	COMPENSATION VALUE CALCULATION METHOD, IN PARTICULAR FOR A DISTANCE PROTECTION METHOD
EP 3 928 169 B1	METHOD AND APPARATUS FOR CYCLE-BASED PROGRAMMING OF A CONTROL PROGRAM FOR A NUMERICALLY CONTROLLED MACHINE TOOL
CN 115204247 B	一种用于配置涂覆机的方法、设备及系统
CN 113168177 B	自主世界模型中的动态细化标记
EP 3 836 049 B1	DATA PROCESSING SYSTEM AND METHOD, STORAGE MEDIUM AND COMPUTER PROGRAM PRODUCT
US 11,947,877 B2	Anti-constraint configuration and enforcement for computer-aided design (CAD) models
CN 108693813 B	安全导向的自动化系统
IN 577510 B	SYSTEMS AND METHODS FOR HVAC EQUIPMENT PREDICTIVE MAINTENANCE USING MACHINE LEARNING
CN 116134389 B	为工厂自动化环境安排工程软件的工程系统和方法
US 12,691,915 B2	System and method for signalling events through a visibility marker associated with a train
AU 2021420762 B2	TESTING A PARAMETERIZATION OF ONE OR MORE MEASURING DEVICES
EP 4 565 470 B1	FORECASTING WEAR CHARACTERISTICS OF RAIL VEHICLES
EP 4 186 000 B1	INCREMENTAL LEARNING FOR ANOMALY DETECTION AND LOCALIZATION IN IMAGES
EP 4 565 978 B1	OUTPUTTING AN AR DISPLAY OF SECURITY INFORMATION
CN 116577607 B	故障定位方法、控制器、设备、供电网络及存储介质
CN 114655850 B	卸船机抓斗的摆角确定方法及装置、系统
EP 3 985 832 B1	MONITORING OF AN ELECTRIC STORAGE DEVICE

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 116940496 B	用于在轨道车辆中配置控制软件的方法
EP 3 794 419 B1	SYSTEM AND METHOD FOR STREAMING MEASUREMENT DATA
CN 114802370 B	用于训练轨道车辆的控制装置的方法、控制装置和轨道车辆
US 12,191,101 B2	Fuse having an integrated measuring function, and fuse body
EP 4 186 216 B1	CENTRALIZED MANAGEMENT OF DATA FLOW MAPS FOR DISTRIBUTED EDGE NODE DEPLOYMENT
US 11,906,987 B2	Pressure control in a supply grid
US 12,214,387 B2	System and method for creating and performing an installation cleaning process for process installations
CN 114245895 B	为至少两个日志文件生成一致表示的方法
US 11,916,545 B2	Operating a power semiconductor element
EP 4 124 000 B1	METHOD, COMPUTER PROGRAM PRODUCT AND SYSTEM FOR PROVIDING SERVICES
IN 583443 B	CONTROLLING A SENSOR SYSTEM
US 11,831,158 B2	Power grid fault detection method and device with distributed energy resource
CN 114557145 B	电子模块的壳体及其制造
CN 111641327 B	用于单相或多相耗电器的开关装置
EP 4 339 718 B1	ZERO-DOWNTIME UPGRADES OF CONTAINERIZED PLC AUTOMATION FUNCTIONS
IN 571288 B	PRIVACY PRESERVING UNIDIRECTIONAL COMMUNICATION DEVICE
US 12,335,804 B2	Method of performing a handover of a mobile network device
CN 111295625 B	过程仪表的异常检测方法、系统及存储介质
EP 3 584 915 B1	INPUT CIRCUIT FOR A POWER SUPPLY
US 11,900,034 B2	Method of modeling a component fault tree for an electric circuit
JP 7657979 B2	アプリケーションプログラムを構築する方法、アプリケーションプログラムを実行する方法、コンピューティング装置および記憶媒体
US 12,106,150 B2	System for data analytics using a local device and a cloud computing platform
CN 112955287 B	全自动安装和触点接通电构件
US 12,277,213 B2	Method and device for securely starting up a container instance
JP 7516682 B2	装置の動作性能パラメータを決定するための方法およびシステム
US 12,321,147 B2	Queue blocks for flexible automation engineering programs
EP 4 143 644 B1	SYSTEMS AND METHOD FOR DIGITALLY AUTHENTICATING USAGE DATA OF AN AUTOMATION SYSTEM
CN 115473943 B	接口扩展方法、扩展接口使用方法、系统和存储介质
DE 10 2023 208 333 B3	Verfahren und Vorrichtung zum Konditionieren einer Vakuumschaltröhre
EP 3 686 697 B1	CONTROLLER OPTIMISATION FOR A CONTROL SYSTEM OF A TECHNICAL ASSEMBLY
EP 3 860 898 B1	METHOD FOR PREVENTING THE DEACTIVATION OF AN IMPERMISSIBLE NUMBER OF COMPONENTS OF A RAIL VEHICLE OF THE SAME TYPE
US 11,764,788 B2	Electrical equipment and method for rectifying device faults
EP 3 959 734 B1	ELECTRICAL SWITCH
CN 120125668 B	检测纸质文件的旋转角度以对纸质文件添加物理标记的方法、装置、系统和存储介质
CN 112639645 B	用于定位传感器的方法、设备和定位系统
EP 4 021 727 B1	SYSTEMS AND METHODS FOR AUTOMATIC DETACHMENT OF SUPPORT STRUCTURES FOR 3D PRINTED PARTS
US 11,994,852 B2	Method, controller, and computer product for reducing oscillations in a technical system
EP 4 123 320 B1	METHOD FOR DETERMINING A CAPACITY LOSS OF A BATTERY, DEVICE AND COMPUTER PROGRAM PRODUCT
DE 10 2018 208 089 B4	Schutzschaltgerät, System und Verfahren
CN 115891423 B	间歇式胶印机的控制方法、装置、电子设备及存储介质
EP 4 320 492 B1	GENERATION AND PROCESSING OF ENCRYPTED PROGRAM INSTRUCTIONS USING A NUMERICAL CONTROL DEVICE
US 12,399,748 B2	Method for overload control in a container-virtualized computing apparatus
US 12,346,099 B2	Method for transforming a data model for automation purposes into a target ontology
CN 115891241 B	用于监控车辆轮胎的硫化过程的方法及评估装置
EP 3 906 477 B1	COMPUTER IMPLEMENTED METHOD AND PROCESSING DEVICE FOR PROCESSING MAINTENANCE INFORMATION IN A DISTRIBUTED DATABASE SYSTEM USING A STORAGE CLIENT UNIT
US 12,278,477 B2	Electrical network
CN 116765954 B	用于曲轴磨床的偏心校准系统
EP 4 001 046 B1	MAINTENANCE DEVICE FOR RAILWAY VEHICLES, RUNNING GEAR OF A RAILWAY VEHICLE AND MAINTENANCE METHOD
EP 4 096 983 B1	METHOD FOR ACTUATING A TRACK CONDITIONING UNIT OR A WHEEL FLANGE LUBRICATING SYSTEM
US 12,594,923 B2	Vehicle having a sensor arrangement for measuring an actuating angle of the actuating element, measuring arrangement and measurement method

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 118541952 B	信息处理方法、装置、计算设备和计算机可读介质
EP 3 991 054 B1	METHOD FOR GENERATING A COHERENT REPRESENTATION FOR AT LEAST TWO LOG FILES
EP 3 665 607 B1	A METHOD FOR PROVIDING RESTRICTED ACCESS TO HARDWARE COMPONENT INTERFACES OF A NETWORK DEVICE
US 11,798,751 B2	Metal contact of a residential circuit breaker including ordered ceramic microparticles
EP 4 063 233 B1	METHOD FOR MONITORING A DEACTIVATION OF A RAILWAY VEHICLE
EP 4 152 540 B1	LOW VOLTAGE CIRCUIT BREAKER
IL 275901 B1	הנוכמ תאירקל ותינה וסחא יעצמאו סילקא תרקבל תכרעמ, רקב, ריווא גוזימ תדיחי תלעפהל הטיש
US 12,271,512 B2	Method and device for authenticating an FPGA configuration
CN 114465904 B	网络拓扑构建方法和计算设备
EP 4 050 634 B1	SWITCHING DEVICE FOR ELECTRIC POWER DISTRIBUTION
US 12,556,880 B2	Method for transferring subscription data and network device
US 12,142,901 B2	Cable routing box, electrical switch having a cable routing box and switch cabinet having a cable routing box
EP 4 276 553 B1	METHOD FOR DIAGNOSIS OF A USER PROGRAM AND ENGINEERING STATION
CN 113569762 B	用于使用振动数据进行生产线瓶颈分析的方法和装置
US 12,375,320 B2	Transmission device for transmitting data and detecting anomalies
US 12,073,005 B2	Expanded integrity monitoring of a container image
CN 113366747 B	用于运行能量转换器的方法、控制单元和能量转换器
KR 102921355 B1	액추에이터 및 액추에이터의 용도
US 12,066,206 B2	Systems and methods for managing object configurations within a structure
IN 541888 B	METHOD AND MEASURING ASSEMBLY FOR DETECTING FAULTS ON ELECTRICAL LINES
CN 112292645 B	控制装置和用于控制装置的运行方法
CN 114378813 B	机械手臂的控制方法、装置和计算机可读介质
DE 10 2023 201 838 B4	Überwachte Stromversorgungseinheit, insbesondere zur Speisung von Komponenten eines Brand- oder Gefahrenmeldesystems
JP 7369102 B2	ネットワークオンチップにおけるブロードキャストのエミュレート
CN 114270901 B	配置无线电连接的方法和装置
BR 112020012932 B1	SISTEMA E MÉTODO PARA CONFIGURAÇÃO DE INSPEÇÃO DE LINHA DE PRODUÇÃO
CN 113748641 B	用于颁发公众信任的证书的方法和系统、工程系统或控制系统和技术设施
US 12,634,131 B2	AI module and method for securely operating an industrial control device
CN 113994219 B	用于采集直流电流的测量装置
EP 4 079 595 B1	DEVICE AND METHOD FOR DETERMINING THE POSITION OF A RAIL VEHICLE
CN 111868643 B	借助于适配预编译的机器代码来运行机床的方法
EP 3 753 683 B1	METHOD AND SYSTEM FOR GENERATING A ROBOTIC PROGRAM FOR INDUSTRIAL COATING
EP 4 055 452 B1	METHOD FOR DETERMINING A CUT PATTERN OF A LATHE, CONTROL DEVICE, AND LATHE
CN 114905546 B	抱闸控制系统、方法、装置及计算机可读存储介质
CN 113544693 B	用于检测安装在建筑物内的建筑物对象的方法和系统
CN 115280171 B	保护开关装置和方法
JP 7624026 B2	コントローラデバイスからデジタル化プラットフォームへのランタイムシステムのシームレスな移行のための方法およびシステム
EP 4 244 452 B1	DOOR GAP LOCK
EP 4 100 295 B1	CARRIER ASSEMBLY FOR A CHASSIS OF A RAIL VEHICLE
EP 4 421 836 B1	SWITCHGEAR DEVICE WITH ARC MANAGEMENT ARRANGEMENT
US 12,489,782 B2	Method for operating a network
EP 4 285 482 B1	COMMUTATION CELL, FLYING CAPACITOR MODULE AND MULTILEVEL INVERTER
EP 4 363 844 B1	AI-ACCELERATED ANALYSIS METHOD, EVALUATION UNIT, GAS CHROMATOGRAPH, ANALYSIS SYSTEM AND COMPUTER PROGRAM PRODUCT
US 12,123,783 B2	Thermal management system, method, and device for monitoring health of electronic devices
IN 464088 B	OVERPRESSURE-RESISTANT VACUUM INTERRUPTER TUBE
US 12,665,709 B2	Distributed handling of forward error correction in hardware assisted verification platforms
CA 3110051 C	HALL SENSOR FAULT DETECTION FOR GATE CROSSING MECHANISMS
EP 3 798 945 B1	SYSTEM, APPARATUS AND METHOD FOR REMOTELY MANAGING OPERATION OF RAIL VEHICLES
CN 111712792 B	在云计算环境中管理子租户的方法和系统
EP 3 891 909 B1	RADIO EQUIPMENT TEST DEVICE

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 523 080 B1	COMPUTER-IMPLEMENTED METHOD FOR DETERMINING A GAUSSIAN INTEGER CONGRUENT TO A GIVEN GAUSSIAN INTEGER MODULO A GAUSSIAN INTEGER MODULUS, METHOD FOR DETERMINING A REDUCTION OF A GIVEN GAUSSIAN INTEGER MODULO A GAUSSIAN INTEGER MODULUS AND CRYPTOGRAPHIC METHOD AND ERROR-CORRECTION METHOD
EP 4 374 405 B1	METHOD OF MANUFACTURING A CONTACT ELEMENT FOR A VACUUM SWITCH, CONTACT ELEMENT AND VACUUM SWITCH
EP 3 602 427 B1	METHOD AND APPARATUS FOR GENERATING TRAVEL PLAN EVALUATION INFORMATION AND STORAGE MEDIUM
IN 509693 B	METHOD FOR PROVIDING FUNCTIONS WITHIN AN INDUSTRIAL AUTOMATION SYSTEM, AND AUTOMATION SYSTEM
DE 10 2022 213 959 B3	Fahrzeug mit Verstelleinrichtung zum Anheben und Absenken eines Wagenkastens relativ zum Fahrgestell
EP 4 119 417 B1	MONITORING METHOD AND SYSTEM
EP 3 987 377 B1	CONVEYOR ASSEMBLY WITH TWO CONVEYOR ELEMENTS CONNECTED IN PARALLEL
CN 112913215 B	用于管理与启用IOT的设备上的对象相关联的操作的方法和系统
US 12,429,386 B2	Temperature measuring device for non-invasive temperature measurement, temperature measuring system and computer program product
EP 3 710 343 B1	RAIL VEHICLE
CN 116653430 B	时滞模型的辨识方法、辨识单元和凹版印刷机套色系统
EP 3 785 350 B1	FLUX RETURN RING AND ELECTRICAL EXTERNAL ROTOR MOTOR
US 12,348,222 B2	Driver circuit and method for controlling a semiconductor switch
US 12,645,212 B2	Method and apparatus for classification and prediction of health of a physical system
CN 112368995 B	使用本地设备和云计算平台进行数据分析的系统
US 12,038,049 B2	Method for withdrawal of a bearing from a gate mechanism
EP 4 194 978 B1	MEASUREMENT ERROR REDUCTION IN A PROCESS BUS SYSTEM
EP 4 529 086 B1	DEVICE FOR CRYPTOGRAPHIC PROTECTION OF A COMMUNICATION DEVICE FOR AN INDUSTRIAL AUTOMATION SYSTEM
US 12,552,226 B2	Method for determining a fresh air volume flow in a vehicle for transporting people, and device for carrying out the method
EP 3 788 807 B1	METHOD FOR SETTING UP A COMMUNICATION CHANNEL BETWEEN A DATA DEVICE AND A TERMINAL OF A USER
US 12,397,833 B2	Prevention of collision between trains
EP 3 797 072 B1	WATER CART AND CONNECTION STATION THEREFOR FOR GALLEY
CN 116648593 B	用于脉动运行的热管散热器和这种热管散热器的制造方法
BR 112021008393 B1	DISPOSITIVOS DE EXTENSÃO E DE AUTOMAÇÃO, SISTEMA, E, MÉTODO PARA PROVER RESULTADOS DE UMA COMPUTAÇÃO EM UM SISTEMA INDUSTRIAL
US 12,032,361 B2	Fully automated assembly and contacting of electrical components
US 12,579,587 B2	System and method for supporting execution of batch production using reinforcement learning
US 12,358,542 B2	Computing system and method for operating a computing system
EP 4 132 832 B1	RAIL VEHICLE COMPRISING A COMPRESSOR, AND METHOD FOR OPERATING A RAIL VEHICLE
EP 3 776 836 B1	MODULAR POWER CONVERTER
US 12,687,496 B2	Measuring instrument for determining the gross or net calorific value of a hydrocarbon-containing fuel gas
US 11,907,576 B2	Method for communicating with one or more field devices
US 12,584,274 B2	Rail expansion device and method
CN 113039613 B	用于使第一仿真系统和第二仿真系统同步的方法和系统
CN 116628485 B	模型可解释性信息生成方法、装置、电子设备和存储介质
EP 3 944 266 B1	CONTROL FOR AN ELECTROMAGNETIC HOLDING BRAKE
US 12,163,862 B2	Arrangement and method for carrying out a self-load test on a rail vehicle
EP 4 185 957 B1	METHOD AND SYSTEM FOR PROTOCOL PROCESSING
US 12,580,682 B2	Rollback for communication link error recovery in emulation
CN 112578274 B	断路器和移动设备
EP 3 634 828 B1	CONTROL METHOD FOR OPERATING A RAIL VEHICLE
EP 4 034 482 B1	METHOD FOR THE COMPUTER-IMPLEMENTED CONFIGURATION OF A CONTROLLED DRIVE APPLICATION OF A LOGISTICS SYSTEM
CN 113556063 B	中间电路转换器的控制装置和中间电路转换器
EP 3 850 175 B1	DEVICE FOR ADJUSTING A DOOR DRIVE
EP 3 930 130 B1	PROTECTIVE DEVICE AND COMPUTER PROGRAM PRODUCT, AND METHOD FOR PARAMETERIZING A PROTECTIVE DEVICE
EP 3 622 692 B1	METHOD FOR HIGH-PERFORMANCE DATA TRANSFER IN A DATA NETWORK WITH, IN PART, REAL-TIME REQUIREMENTS AND SYSTEM FOR CARRYING OUT THE METHOD
CN 111260176 B	用于排除技术设施中的故障状况的方法和系统
CN 115699124 B	基于硬件的传感器分析
CN 115085963 B	认证自动化系统的通信网络中的节点

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 900 156 B1	SHEET PACKAGE FOR AN ELECTRIC MACHINE
CN 114041280 B	用于适配至少一个预定义帧延迟的计算机实现方法
CN 112352240 B	用于证明或检查数据处理装置的安全性的数据处理装置、系统和方法
US 12,511,379 B2	Method and device for identifying malicious services in a network
EP 4 381 714 B1	METHOD FOR TRANSMITTING TIME-CRITICAL DATA WITHIN A COMMUNICATION SYSTEM AND COMMUNICATION DEVICE
US 11,909,194 B2	Differential protection device and protection system for monitoring objects to be protected in a power supply network
CN 113541073 B	用于接触母线的模块化构造的出线盒
CN 111108452 B	用于为可编程逻辑控制器提供服务的方法和装置
EP 4 236 130 B1	OFDM DATA TRANSMISSION METHOD AND DEVICES FOR CARRYING OUT THE SAME
US 11,816,410 B2	System and method for formal fault propagation analysis
EP 3 811 165 B1	ADAPTIVE REPEATER FOR INDUSTRIAL COMMUNICATION
EP 3 957 517 B1	OVERHEAD CABLE SYSTEM WITH CROSSING WIRES
EP 3 939 241 B1	TRAIN DETECTION SYSTEM AND METHOD FOR TRANSMITTING MESSAGES IN A TRAIN DETECTION SYSTEM
US 11,975,745 B2	Modular foot platform for a driver's cab of a rail vehicle
DE 10 2023 202 292 B3	Brennstoffzellensystem
IN 548743 B	METHOD FOR DETERMINING A DIRECTION OF TRAVEL AND/OR POSITION, TRACK-SIDE DEVICE, AND DEVICE FOR A VEHICLE
KR 102871432 B1	기술적 설비를 위한 제어 시스템 및 설비 컴포넌트의 인증서 요청을 전송하는 방법
EP 4 466 822 B1	TRACEABLE REQUEST OF A CERTIFICATE REQUEST BY A REGISTRATION AUTHORITY
EP 3 829 951 B1	AUTOMATIC VEHICLE BASED CONTROL SYSTEM AND METHOD FOR A RAILROAD VEHICLE
US 11,782,419 B2	Method for automatically generating a behavior tree program for controlling a machine
CN 111868645 B	数字双胞胎建模仿真方法、装置和系统
US 12,217,407 B2	Method for automatically assisting with an inspection and/or condition monitoring of objects
US 11,983,857 B2	System and method for visual production line inspection of different production items
EP 4 230 965 B1	CONTROL OF A SENSOR SYSTEM
CN 115248090 B	用于断路器的测量装置
US 12,568,143 B2	System, device, method and storage medium for PLC connection
EP 3 736 753 B1	METHOD, FLEET MANAGEMENT DEVICE AND SYSTEM FOR DETERMINING A PREFERRED LOCATION OF A VEHICLE
EP 3 997 857 B1	DETECTION OF MANIPULATED CLIENTS OF A FACTORY CONTROL SYSTEM
CN 114270336 B	用于对数据点进行标注的方法和装置
US 12,651,210 B2	Methods and systems for hands-free fare validation and gateless transit
EP 3 798 754 B1	METHOD FOR AUTOMATICALLY LOGGING IN A USER TO A FIELD DEVICE AND AN AUTOMATION SYSTEM
EP 3 756 020 B1	DETERMINISTIC STELLAR BUILT-IN SELF-TEST
IN 493522 B	METHOD AND APPARATUS FOR ADJUSTING PRODUCT MODEL, AND STORAGE MEDIUM
US 12,491,590 B2	Method for repairing workpiece involves using requirement information to check whether simulated physical behavior fulfills requirement
EP 4 204 181 B1	METHOD FOR THE COMPUTER-AIDED OPTIMIZATION OF TOOL TRANSPORTATION OPERATIONS FOR AT LEAST ONE TOOL MAGAZINE HAVING A NUMBER OF MAGAZINE SPACES
EP 3 993 960 B1	STOPPING OF A PRODUCTION MACHINE ON A COLLISION-FREE WEB
EP 4 088 984 B1	SYMMETRICAL DATA TRANSMISSION METHOD AND DEVICES FOR CARRYING OUT THE METHOD
US 12,276,948 B2	Method and system for providing time-critical control applications
US 11,907,100 B2	Generation of trace messages including an instruction retirement count and a stall count
CN 114341877 B	根本原因分析方法、装置、电子设备、介质以及程序产品
US 11,923,163 B2	Fuse element and fuse
CN 113228560 B	用于发行的发行设备和方法以及用于请求数字证书的请求设备和方法
US 12,176,823 B2	Four-level power converter
CN 114751303 B	抓斗式卸船机闭环防摇系统、方法及抓斗式卸船机
EP 4 087 765 B1	PASSENGER TRANSPORT VEHICLE
US 12,361,351 B2	Distributing order execution in a MOM system
EP 3 422 512 B1	FIRE PROTECTION SWITCH AND METHOD
US 12,471,118 B2	Method of communicating with a plurality of user equipment
EP 3 835 896 B1	EDIT SESSION FOR MULTI TOOL MANAGEMENT
US 12,438,866 B2	Automatic, secure and bulk onboarding of devices
CN 115410878 B	用于断路器的安全锁结构及具有其的断路器

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115130294 B	烫印机伺服轴定位方式的计算方法、装置及烫印机
US 12,252,162 B2	Multi-channel communication between end of train device and head of train device
CN 115903654 B	控制方法、控制系统、控制器和横切割机
US 11,934,182 B2	Method for computer-supported simulation of operation of a machine working in an automated manner
CN 110915139 B	用于数据获取的方法、现场设备和云基础设施
DE 10 2022 210 429 B4	Verbesserter Schalter und eine Schaltanlage mit einem derartigen verbesserten Schalter sowie ein Verfahren zum Schalten eines derartigen verbesserten Schalters
EP 3 961 195 B1	MEASURING DEVICE FOR DETERMINING THE CALORIFIC VALUE OF A HYDROCARBON-CONTAINING FUEL GAS
CN 112640593 B	具有用于电子构件的安装位置的电路载体、电子电路和制造方法
US 12,403,944 B2	Arrangement for train protection
CA 3101845 C	METHOD AND ARRANGEMENT FOR ACTUATING A METAL-OXIDE-SEMICONDUCTOR FIELD-EFFECT TRANSISTOR
US 12,169,713 B2	Managing artifact information including finding a searched artifact information item
EP 4 169 207 B1	METHOD, DEVICES AND SYSTEM FOR EXCHANGING DATA BETWEEN A DISTRIBUTED DATABASE SYSTEM AND DEVICES
DE 10 2023 204 778 B3	Bodenbaugruppe für einen elektrischen Schalter und Vorrichtung aus einem elektrischen Schalter und solch einer Bodenbaugruppe
US 11,923,792 B2	Software based condition monitoring for machines
EP 4 084 985 B1	ROAD-GUIDED MOTOR VEHICLE AND METHOD FOR RAISING THE PANTOGRAPH OF A POWER COLLECTOR OF A ROAD-GUIDED MOTOR VEHICLE
CN 111221302 B	技术模块集成到技术设施上级控制层中的方法和技术模块
KR 102970890 B1	인공 지능용 컴퓨팅 유닛에 의한 기술적 시스템의 제어
EP 3 903 154 B1	METHOD FOR DETERMINING A THERMAL CONSUMPTION OF AN ENERGY SYSTEM, ENERGY MANAGEMENT SYSTEM AND ENERGY SYSTEM
US 12,456,287 B2	Synthetic dataset creation for object detection and classification with deep learning
AU 2022357513 B2	METHOD AND DEVICE FOR MEASURING VALVE CHARACTERISTIC PARAMETERS
EP 4 069 624 B1	A MECHANICAL ANTI SWAY CONTROL METHOD WHICH CONTROL TWO COUNTERPART MOTOR DIFFERENT SPEED AS ZERO BY PI CONTROLLER ON CRANE
US 11,954,419 B2	Dynamic allocation of computing resources for electronic design automation operations
CN 115380258 B	减少机床内的摩擦
CN 115702425 B	对分层的数据结构进行索引的方法
EP 4 462 201 B1	CONTROL SYSTEM AND METHOD FOR CONTROLLING A DEVICE OR PLANT
CN 115968536 B	测试无线电设备
AU 2022368950 B2	CALIBRATION METHOD FOR A FLOW MEASUREMENT SYSTEM, FLOW MEASUREMENT SYSTEM AND COMPUTER PROGRAM PRODUCT
US 12,346,108 B2	Method for remote assistance and device
US 12,506,333 B2	Circuit breaker
US 12,694,178 B2	Hybrid switching architecture for SerDes communication channels in reconfigurable hardware modeling circuits
CN 110399597 B	模板提取系统、装置和方法
US 12,682,071 B2	Software security defect prediction methods and devices
CN 114365079 B	作为系统性能模拟的预处理的基于性能的系统配置
EP 4 132 732 B1	METHOD AND ASSEMBLY FOR SEPARATING EXCESS MATERIAL FROM A COMPONENT PRODUCED USING ADDITIVE MANUFACTURE
EP 4 551 900 B1	SYSTEM AND METHOD FOR THREE DIMENSIONAL SCANNING OF AN OBJECT
US 12,437,114 B2	Method and system for granting access rights to control applications of an industrial automation system
EP 4 102 313 B1	SYSTEM AND METHOD FOR DETERMINING OPERATIONAL CONFIGURATION OF AN ASSET
EP 3 931 653 B1	METHOD FOR ENGINEERING AND SIMULATING AN AUTOMATION SYSTEM BY MEANS OF DIGITAL TWINS
CN 112671271 B	启动转矩自适应的方法和装置
CN 114189150 B	用于调节开关转换器的系统和方法
EP 4 298 701 B1	SOLID-STATE CIRCUIT BREAKER CONFIGURED TO DISCHARGE AND DISSIPATE RECOVERY VOLTAGE
CN 117326155 B	颗粒包装机、对标方法、系统及计算机可读存储介质
EP 3 406 370 B1	ADDITIVE MANUFACTURING METHOD AND SYSTEM
US 11,901,730 B2	Grid impedence estimation for power converter controller
IN 501621 B	SYSTEM AND METHOD FOR CHECKING SYSTEM REQUIREMENTS OF CYBER-PHYSICAL SYSTEMS
CN 112534364 B	同步方法，运行工业设施的方法、装置、计算机程序产品和计算机可读介质
EP 4 204 632 B1	CONTROL OF A WATER SUPPLY SYSTEM
EP 3 489 773 B1	METHOD FOR THE COMPUTER-BASED CONTROL OF A TECHNICAL SYSTEM, IN PARTICULAR AN ENERGY GENERATION PLANT

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 279 317 B1	POWER CONTROL DEVICE FOR CONTROLLING CHARGING ELECTRIC POWER OF POWER SOURCE
EP 4 063 232 B1	VEHICLE, IN PARTICULAR RAILWAY VEHICLE, AND METHOD FOR ITS OPERATION
US 12,606,039 B2	Charging energy storage units of a vehicle at weak energy supply systems
EP 4 449 213 B1	SPEED DEPENDENT OVERGRINDING BETWEEN SETS WITH DISCONTINUOUS COURSES
EP 4 388 280 B1	COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR IMPROVING THE SIGNAL QUALITY OF SENSOR DATA
CN 112424702 B	过程控制器及其方法和系统
CN 110716510 B	用于自动化应用的抽象层
US 12,394,037 B2	Physics-informed anomaly detection in formed metal parts
EP 3 863 231 B1	AUTOMATION NETWORK WITH PACKET-BASED COMMUNICATION BETWEEN HOST AND CLIENT AND METHOD FOR OPERATING AN AUTOMATION NETWORK
US 12,411,464 B2	Controlling a technical system by data-based control model
US 12,517,499 B2	Method for the deployment of a software module in a manufacturing operation management system
US 11,922,256 B2	Industrial device and method of reading a tag located on an object using a model
CN 116710843 B	用于自由形状的光学邻近校正
CN 116963953 B	用于轨道车辆的栏杆装置
EP 3 865 357 B1	DEVICE FOR BRAKE DESIGN
SG 11202301535 B	METHOD AND SYSTEM FOR IDENTIFYING OBJECTS
EP 4 258 310 B1	HOUSING MODULE, INSULATING MATERIAL HOUSING AND PROTECTIVE SWITCHING DEVICE
EP 4 499 439 B1	POWER SUPPLY SYSTEM FOR SUPPLYING POWER TO A ROAD VEHICLE
US 12,154,426 B2	Method for automatic testing of a fire alarm system
US 12,563,390 B2	Authenticating a device in a communication network of an automation installation
DE 10 2023 213 113 B3	Vorrichtung und Verfahren zur Kapazitätsbestimmung von Hybrid-Kondensatorenergiespeichern in einem Hybrid-Kondensatorenergiespeicher und Schaltanlage mit einer solchen Kapazitätsbestimmung
EP 3 854 022 B1	METHOD AND DEVICE FOR THE TRANSMISSION OF DATA IN A PUBLISH-SUBSCRIBE SYSTEM
US 11,865,949 B2	Assembly for securing an electrical external power supply connector
CN 113678123 B	身份提供器管理SSO会话
US 12,502,772 B2	Artificial intelligence based robot cable simulation
US 12,206,398 B2	Switching device for a DC voltage grid and operating method for the switching device
EP 3 961 336 B1	CONTROLLING AN OPERATION OF A TECHNICAL SYSTEM AUTOMATICALLY
EP 4 497 648 B1	FASTENING ARRANGEMENT WITH A DEVICE CARRIER
EP 4 500 488 B1	MONITORING SYSTEM WITH A PERSON DETECTOR
CN 115427906 B	确定设施中的执行器与传感器之间邻近关系的方法和装置
EP 4 479 806 B1	COMPENSATION FOR TOOL DEFLECTION THROUGH DYNAMIC ADJUSTMENT OF TOOL GEOMETRY
US 11,816,016 B2	Identifying causes of anomalies observed in an integrated circuit chip
EP 4 018 276 B1	EXTENDED TREND DISPLAY OF PROCESS DATA AND SECONDARY ALARMS
US 12,081,567 B2	Analysis device, method and system for operational technology system and storage medium
EP 4 370 918 B1	METHOD AND SYSTEMS FOR DETERMINING A MEASUREMENT ERROR IN A HYDROGEN CONCENTRATION MEASUREMENT
DE 10 2023 209 393 B4	Horizontal geführtes Rollo für eine Galley eines Schienenfahrzeugs mit verdeckter unterer Führungsschiene
EP 3 890 177 B1	INTERMEDIATE CIRCUIT INVERTER AND CONTROL DEVICE FOR AN INTERMEDIATE CIRCUIT INVERTER
EP 4 407 220 B1	METHOD AND DEVICE FOR MEASURING VALVE CHARACTERISTIC PARAMETERS
EP 4 517 531 B1	METHOD FOR CARRYING OUT A TECHNICAL PROCESS IN THE CONTROL MODE AND REPAIR MODE
US 12,011,935 B2	Printing apparatus, printer system and method for printing on an object
EP 4 229 359 B1	METHOD FOR GENERATING A MAP FOR AUGMENTED REALITY DEVICES IN AN INDUSTRIAL FACILITY
EP 4 356 411 B1	SWITCH ARRANGEMENT AND METHOD FOR OPERATING A SWITCH ARRANGEMENT
EP 3 958 038 B1	METHOD FOR MONITORING WORK ON RAILWAYS AND WARNING DEVICE FOR THIS METHOD
US 12,323,796 B2	Electric vehicle supply equipment (EVSE) configuration management system and method
US 12,547,441 B2	Protection of a process of setting up a subdirectory and a network interface for a container instance
IN 570945 B	METHOD AND APPARATUS FOR COUPLING THE FUNCTIONAL CONTROL IN A DISTRIBUTED AUTOMATION SYSTEM
EP 4 118 731 B1	METHOD FOR MANUFACTURING OF AN ELECTRICAL MACHINE
EP 4 147 102 B1	OPERATION OF A MACHINE TOOL WITH AT LEAST TWO AXES
CN 111630534 B	用于分析模型的协作机器学习的方法
US 12,566,907 B2	Hyperspace-based processing of datasets for electronic design automation (EDA) applications
CN 118159807 B	用于流量测量系统的校准方法、流量测量系统和计算机程序产品

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
DE 10 2023 205 350 B4	Gesteuerte Bereitstellung und Verstauung von Ladekabeln
CN 115589183 B	扭矩枪的位置变化计算方法、扭矩枪的控制方法和扭矩枪
CN 111559446 B	螺旋弹簧的支撑装置、车辆合装托盘、及车辆合装系统
US 12,269,516 B2	Method for operating an air conditioning system for a vehicle, and air conditioning system arrangement
IN 491513 B	METHOD AND SYSTEM FOR MANAGING OPERATION ASSOCIATED WITH AN OBJECT ON IOT ENABLED DEVICES
EP 3 987 487 B1	COMPUTER IMPLEMENTED METHOD AND SYSTEM FOR RETRIEVAL OF MULTI SPECTRAL BRDF PARAMETERS
EP 3 871 480 B1	METHOD FOR DETERMINING SET-UP FAMILIES FOR A PICK-AND-PLACE LINE FOR POPULATING CIRCUIT BOARDS WITH ELECTRONIC COMPONENTS
US 12,455,305 B2	Projection distribution of magnetic field sensors for measuring a magnetic field of a conductor of an electric current
EP 4 298 875 B1	SWITCH CABINET FOR POWER ELECTRONICS
CN 111880466 B	上位机向可编程逻辑控制器传输数据的方法
EP 3 789 264 B1	METHOD AND DEVICE FOR SLIP DETECTION AND RAIL VEHICLE
SA 14451 B1	مدخل قياس عالمي لتوصيل محول إشارة صغير وجهاز كهربائي به مدخل قياس من هذا النوع
US 11,783,039 B2	Method for verifying an execution environment used for execution of at least one hardware-application provided by a configurable hardware module
US 12,126,611 B2	Engineering control system, technical installation and method and system for awarding publicly trusted certificates
US 12,417,606 B2	Method and system for anomaly detection using multimodal knowledge graph
US 11,782,861 B2	Extension module for independently storing calibration data, component, and component calibration method
CN 114787725 B	用于控制技术系统的控制装置和用于配置控制装置的方法
US 12,510,247 B2	Fuel injector combustion seal assembly
EP 4 098 509 B1	METHOD FOR OPTIMISED ENTRY INTO A TARGET SECTION BY DYNAMICALLY DETERMINING RELEASE SPEED
EP 4 188 864 B1	METHOD AND APPARATUS FOR EMULATING AUTOMATED GUIDED VEHICLE (AGV) SYSTEM
CN 112015267 B	管理建筑物自动化环境的系统、设备和方法
EP 4 081 739 B1	CONTROLLING A HEAT NETWORK
EP 3 731 987 B1	LASER METAL DEPOSITION WITH INOCULATION
EP 4 334 813 B1	PROTECTION OF A SETUP PROCESS OF A SUBDIRECTORY AND A NETWORK INTERFACE FOR A CONTAINER INSTANCE
EP 4 047 433 B1	CONFIGURABLE NOTIFICATIONS REGARDING CONDITION CHANGES OF TECHNICAL OBJECTS
CN 115906205 B	从选择性地确定的环境图像构建环境视图
US 12,360,503 B2	Light fixture of building automation system
CN 113346297 B	在电源的汇流排装置与负载的抽头之间的连续式触点接通装置
CN 115114683 B	用于将自主技能执行中的约束反馈到设计中的系统与方法
US 12,373,195 B2	Method of programming a software module associated with a firmware unit of a device
EP 4 500 424 B1	OPTIMIZATION OF A PRODUCTION PLANNING
EP 4 401 901 B1	MULTI-LAYER MAGNET AND METHOD OF MANUFACTURING THE SAME
CN 114064605 B	提供针对工业系统的领域模型
EP 3 839 666 B1	CONTROL SYSTEM FOR CONTROLLING A TECHNICAL SYSTEM AND METHOD FOR CONFIGURING THE CONTROL DEVICE
US 12,683,096 B2	Device for locking an assembly, and system for locking different assemblies
EP 3 767 515 B1	METHOD FOR THE DYNAMIC AND PARTIAL RECONFIGURATION OF AN ELECTRONIC COMPONENT
EP 4 133 571 B1	MATERIAL LAYER FOR A LAMINATED CORE OF AN ELECTRIC MACHINE
EP 3 575 909 B1	METHOD FOR MONITORING A PLURALITY OF MECHANICAL SYSTEMS
US 12,276,614 B2	System and method for imaging reflecting objects
EP 4 298 004 B1	METHOD AND ASSEMBLY FOR DETERMINING THE MOVEMENT STATE OF A RAIL VEHICLE WHEEL
US 12,298,745 B2	Event related load restrictions of a server of a control system of a technical plant
IN 594176 B	ELECTRICAL EQUIPMENT ITEM AND METHOD FOR RECTIFYING DEVICE FAULTS
EP 4 151 497 B1	SYSTEM AND METHOD FOR SHORT VEHICLE DETECTION
US 12,339,830 B2	System and method for managing sensor data associated with an IoT environment
EP 3 767 503 B1	METHOD AND TEST ENVIRONMENT FOR PROVIDING AN APPLICATION FOR A COMPUTER-CONTROLLED COMPONENT
EP 4 375 768 B1	METHOD AND MACHINE CONTROLLER FOR CONTROLLING A MACHINE
CN 111699472 B	确定用于开发复杂嵌入式或信息物理系统的方法
US 12,210,331 B2	Automation engineering learning framework for cognitive engineering
US 12,109,735 B2	Construction of conformal cooling channels for injection mold designs
EP 3 746 998 B1	SAFETY DEVICE INSPECTION

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 780 056 B1	VENTILATING INSULATING MEMBER FOR INTERRUPTER UNITS, SWITCHING DEVICE AND SWITCHGEAR ARRANGEMENT COMPRISING AN INTERRUTER UNIT
DE 10 2018 215 853 B4	Fronttafeldichtung eines Befehls- und Meldegeräts, insbesondere eines Drehbetätigers
US 12,046,825 B2	Antenna arrangement and rail vehicle having a plurality of antennas
US 12,288,967 B2	Method for determining the state of an electrical switchgear assembly, monitoring unit for an electrical switchgear assembly, and electrical switchgear assembly
CN 112150544 B	吊钩到位检测方法、装置和计算机可读介质
CN 115836336 B	用于道路车辆的辅助系统
CN 114506731 B	纸板供给控制方法及装置、纸板供给系统、介质
EP 3 976 404 B1	METHOD FOR CONTROLLING AN AIR-CONDITIONING DEVICE
EP 4 071 776 B1	METHOD FOR PROVIDING A PRINTING SCREEN
EP 3 885 860 B1	METHOD, COMPUTER-IMPLEMENTED TOOL AND POWER PLANT CONTROL DEVICE FOR DETECTING POWER PRODUCTION DEGRADATION OF SOLAR POWER PLANTS
US 11,880,189 B2	Method and apparatus for optimizing gasifier model
EP 4 264 832 B1	DRIVER SWITCH AND METHOD FOR CONTROLLING A SEMICONDUCTOR CIRCUIT
US 12,647,485 B2	Method for operating a device in an IoT system
US 12,360,500 B2	Artificial intelligence computing device, control method and apparatus, engineer station, and industrial automation system
US 12,001,819 B2	Method, computer program product and modeling tool for the reference model-based, requirement-based development of a technical system
EP 4 327 168 B1	GRANULAR DISPLAY OF A LOADING STATE OF WEB-BASED ELEMENTS OF A CONTROL SYSTEM FOR A TECHNICAL PLANT
US 12,110,044 B2	Passenger transport vehicle
CN 120543135 B	用于规定性消息传递的方法和系统
CN 111406238 B	用于规划特定的工艺技术设施的方法和设备
US 12,617,092 B2	Method and a system for detecting possible collisions of objects in an industrial manufacturing environment
US 11,924,227 B2	Hybrid unsupervised machine learning framework for industrial control system intrusion detection
EP 3 810 480 B1	KINEMATIC COUPLING
US 12,689,541 B2	System including a communication bus for data transmission and method for operating a communication bus
CN 117361215 B	码垛定位位置确定及码垛控制方法、装置和电子设备
US 12,076,865 B2	Method, computer program product and robot control system for the contact-based localization of objects that can be moved when manipulated by robot, and robot
EP 3 836 184 B1	VENTILATING CONNECTOR UNIT FOR CIRCUIT BREAKER
US 11,809,844 B2	Creating an app method and system
CN 110329913 B	用于大车定位的装置、方法和控制起重设备的系统
EP 4 150 667 B1	CONTACT SYSTEM WITH RELIABLE INSULATION
SG 10202302548 B	Operating method for a loading system and automation system for controlling a loading system
US 11,958,479 B2	Method, computer program product, central control unit and control system for controlling at least partly automated vehicles in a roadway danger zone, in particular intersections of roadways in road traffic
EP 4 022 486 B1	SYSTEMS AND METHOD FOR PROCESSING TOPOLOGY OPTIMIZED GEOMETRIES
EP 4 295 203 B1	CONTROL SYSTEM FOR A TECHNICAL INSTALLATION WITH A TREND CURVE DIAGRAM
US 12,627,150 B2	System and method for controlling power distribution systems using graph-based reinforcement learning
US 12,669,792 B2	Exchanging of a programmable logic controller
CN 115379979 B	用于控制轨道处理单元以及轮缘润滑装置的方法
EP 4 457 119 B1	FOLDING SEAT FOR A VEHICLE
EP 4 552 030 B1	INTERPRETING AND CATEGORIZING TRAFFIC ON INDUSTRIAL CONTROL NETWORKS
CN 114766086 B	用于传输数据的传输设备
DE 10 2024 207 273 B4	Hubliftvorrichtung zur Überbrückung unterschiedlicher Fußbodenniveaus in einem Durchgang eines Schienenfahrzeugs
EP 4 335 127 B1	COMPUTER-IMPLEMENTED METHOD FOR OPERATING A HIGH AVAILABILITY END-DEVICE IN A NETWORK
US 11,942,811 B2	Method for precharging a network section
US 11,961,012 B2	Method for computer-implemented determination of a data-driven prediction model
IN 499129 B	PROTECTION AGAINST INTERNAL FAULTS
EP 3 672 375 B1	DIMMER
EP 4 022 404 B1	SYSTEM AND METHOD FOR ADMINISTRATION OF DRIVE COMPONENTS
EP 3 804 271 B1	HYBRID UNSUPERVISED MACHINE LEARNING FRAMEWORK FOR INDUSTRIAL CONTROL SYSTEM INTRUSION DETECTION
DE 10 2023 209 448 B4	Sitz für ein Fahrzeug des Personentransports

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 113646131 B	具有多重振动检测的机床中的振动衰减
KR 102800382 B1	직류 회로망을 위한 과전류 보호 장치
EP 3 977 702 B1	NETWORK ADAPTER FOR THE UNIDIRECTIONAL TRANSMISSION OF DATA
EP 4 050 635 B1	SWITCHING DEVICE FOR ELECTRIC POWER DISTRIBUTION
CN 115579254 B	双电源转换开关
IN 543494 B	OPERATOR-INDEPENDENT COMPACT SPRING-ACTION SWITCHING MECHANISM AND ELECTROMECHANICAL PROTECTIVE SWITCHING DEVICE
US 11,948,856 B2	Heat sink for an electronic component
US 12,676,475 B2	Electrical power supply system
US 11,999,389 B2	Coupling support for a central buffer coupling of a rail vehicle
DE 10 2024 208 755 B3	Vorrichtung und Verfahren zum strombegrenzten Einschalten eines mehrpoligen Leistungsschalters
EP 4 377 981 B1	PROTECTIVE SWITCHING DEVICE
MX 426409 B	SISTEMA Y PROCEDIMIENTO PARA PONER EN SERVICIO EL CONTROL DE LA TOMA DE AIRE FRESCO
EP 4 174 720 B1	METHOD AND CONTROL DEVICE FOR CONTROLLING A TECHNICAL SYSTEM
EP 3 974 285 B1	METHOD FOR DETERMINING AN ENERGY EFFICIENT OPERATION MODE OF A VEHICLE AND VEHICLE
EP 4 522 481 B1	ARRANGEMENT FOR VENTILATING A RAIL VEHICLE COMPARTMENT
JP 7389255 B2	集積回路チップの潜在的な通信異常の検出
EP 4 385 293 B1	THERMALLY CONDUCTIVE SUPPORT
EP 4 050 352 B1	OPEN CIRCUIT FAULT MANAGEMENT ON OVERHEAD LINES
CN 113424446 B	用于电子开关的开关模块
EP 3 985 321 B1	CONTROL OF ROOM COMFORT
US 11,882,043 B2	Method and system for providing time-critical services via a flow control environment
EP 4 505 301 B1	METHOD AND SYSTEM FOR PROVIDING CONTROL APPLICATIONS
EP 3 814 856 B1	REAL TIME AUTOMATION DEVICE WITH A REAL-TIME DATA BUS
CN 115330011 B	用于预测运动系统的无碰撞姿势的方法和系统
CN 116097634 B	机器社交媒体平台上的机器对机器通信的超链接消息
CN 113039711 B	用于识别关断电流的方法、电开关和直流电压电网
CN 115210657 B	使用优化参数集制造或控制技术系统
CN 114761183 B	用于为机器人系统开发神经技能的计算机化工程工具和方法
EP 3 832 508 B1	BLOCKING OR REVOKING A DEVICE CERTIFICATE
CN 112970166 B	用于低压电路的装置
DE 10 2023 203 671 B3	Aufnahmeanordnung für einen Container für ein Schienenfahrzeug
CN 112997373 B	具有过压保护的电开关
IN 589872 B	CIRCUIT BREAKER AND METHOD
EP 4 231 009 B1	PNEUMATIC MODULE FOR GAS ANALYSIS DEVICE, AND MANUFACTURING METHOD AND COMPUTER PROGRAM PRODUCT THEREFOR
US 11,868,291 B2	Data transfer system and method for transferring data in a data transfer system
CN 111801672 B	用于设计和制造稳定的网格结构的系统和方法
US 12,068,209 B2	Power module
US 12,625,493 B2	Monitoring methods, computer program product, monitoring unit, gas analysis device, and use of artificial intelligence
CN 114175581 B	用于单向传输数据的网络适配器
US 11,777,617 B2	Testing of radio equipment
CN 114555973 B	弹性支承装置
EP 3 587 213 B1	CHASSIS WITH A CLADDING ASSEMBLY
DE 10 2022 209 456 B3	Schienenfahrzeug
US 11,904,910 B2	Variable transformer holding device for e-locos
CN 114113213 B	确定含碳氢化合物的燃料气体总热值或净热值的测量装置
EP 4 502 738 B1	CIRCUIT ARRANGEMENT FOR CONTROLLING A MACHINE AND MACHINE SYSTEM
US 12,233,925 B2	Method for the configuration of control software in a rail vehicle
CN 113711325 B	用于中压和高压应用的真空开关设备
US 12,294,215 B2	Redundant power supply, in particular for data centers, and method and computer program for the operation thereof
EP 3 968 212 B1	COMPUTER-IMPLEMENTED METHOD FOR PROVIDING SWITCH STATE DATA
EP 4 121 334 B1	METHOD FOR COUPLING MEANS OF TRANSPORT, AND COMPUTER SYSTEM AND MEANS OF TRANSPORT

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 112912885 B	用于印刷电路板原理图的接口连接
US 12,003,101 B2	Method for controlling an exchange of energy in an energy system, control center, energy system, and storage medium
CN 113518695 B	履带式消防机器人及其控制方法
EP 3 992 483 B1	DRIVE UNIT COMPRISING A MOTOR, A GEARBOX AND A COUPLING CONNECTING THE SAME
EP 4 425 854 B1	NETWORK MODELLING USING A NETWORK SWITCH
US 12,416,913 B2	Method for the automated creation of a skill interface, computer program product, and device
CN 116560304 B	粉末床熔融系统的控制方法、装置、设备、系统及介质
CN 111882084 B	用于对工厂中的现场设备进行维护的方法和装置
AU 2023333001 B2	SYSTEM AND METHOD FOR MANAGING OPERATIONS OF A TRAIN RELATIVE TO A FOULING MARK
EP 4 558 870 B1	METHOD AND SYSTEM FOR MANAGING TECHNICAL INSTALLATION DURING OCCURRENCE OF ERROR STATE IN A CONTROLLER
US 12,429,835 B2	Endpoint registry across ecosystems
EP 3 794 711 B1	SINGLE TOOTH SEGMENT
DE 10 2022 203 545 B4	Fahrzeug zur Personenbeförderung mit Druckschutzeinrichtung
EP 4 530 764 B1	METHOD FOR OPERATING A CYCLE-ORIENTED CONTROL SOFTWARE
CN 114450644 B	生产机器在无碰撞的轨迹上的停止
CN 115691032 B	光学烟感探测器及其方法
CN 116074010 B	技术设施的控制系统和用于移除一个或多个证书的方法
US 11,809,484 B2	Training of differentiable renderer and neural network for query of 3D model database
CN 113826127 B	变压器的健康状态评估方法、装置及存储介质
US 12,499,373 B2	Method, system, and apparatus for creating knowledge graph in industrial field
EP 4 136 824 B1	DEVICE FOR USE IN THE INTERNET OF THINGS
CN 113924328 B	浇注树脂、由其制成的成型体和成型体的用途
EP 4 264 291 B1	METHOD FOR MONITORING AT LEAST ONE SEMICONDUCTOR ELEMENT IN A SEMICONDUCTOR MODULE
EP 3 671 195 B1	THERMORESISTIVE GAS SENSOR
US 12,690,176 B2	Power module having at least one power unit
CN 114365049 B	使用生产数据快速建模的方法、系统、和存储介质
EP 4 377 647 B1	TEMPERATURE MEASURING DEVICE FOR NON-INVASIVE TEMPERATURE MEASUREMENT, TEMPERATURE MEASURING SYSTEM, AND COMPUTER PROGRAM PRODUCT
US 12,445,436 B2	Configuring offline electric vehicle supply equipment (EVSE) via 2-factor authentication
EP 3 738 007 B1	AUTOMATIC CONFIGURATION SYSTEM FOR A DETECTION SYSTEM, METHOD FOR OPERATING AN AUTOMATIC CONFIGURATION SYSTEM, AUTONOMOUS SYSTEM HAVING A DETECTION SYSTEM AND COMPUTER PROGRAM PRODUCT
US 11,949,742 B2	Condition monitoring system and method
CN 115004637 B	实时且独立的网络攻击监控和自动网络攻击响应系统
CN 121013979 B	电解装置、在电解装置中测量气体组分的浓度的方法、计算机程序产品、测量器的应用和模拟程序产品
US 12,209,622 B2	Assembly for connecting two drive sides of a drive train of a rail vehicle
EP 3 793 093 B1	COMMUNICATION SYSTEM AND METHOD FOR A RAILWAY NETWORK
DE 10 2021 210 862 B4	Vakuumschalteinrichtung und Herstellungsverfahren für eine Vakuumschalteinrichtung
EP 4 200 972 B1	METHOD AND SYSTEM FOR CONTROLLING AN ELECTRIC MACHINE
US 12,679,428 B2	Assembly for transmitting longitudinal forces in a rail vehicle
EP 4 450 358 B1	RECEIVING ARRANGEMENT FOR A CONTAINER FOR A RAIL VEHICLE
DE 10 2025 104 068 B3	Elektrisches Kontaktieren eines Bewegkontakts eines Leistungsschalters
EP 4 476 012 B1	MAGNETIC SHEET CREATED THROUGH ADDITIVE MANUFACTURE, LAMINATED CORE AND ELECTRIC MACHINE
CN 113661569 B	传热设备和构件
US 11,961,379 B2	Measurement chamber for mounting on a smoke detection unit, having a light trap according to the principle of a fresnel stepped lens
US 11,968,074 B2	Method for operating a control arrangement for an energy network, and control arrangement
EP 4 194 749 B1	CONTROL AND/OR REGULATION OF A COMBUSTION DEVICE AND COMBUSTION DEVICE
CN 112534792 B	在云计算环境中提供对云服务的安全访问的方法和系统
IN 527602 B	PRINTING APPARATUS, PRINTER SYSTEM AND METHOD FOR PRINTING ON AN OBJECT
CN 114669935 B	物料的焊接方法、装置和计算机可读介质
CN 119137717 B	用于制造具有翅片和外围侧壁的散热器的方法
CN 116194854 B	自动创建技能界面的方法、计算机程序产品和设备
CN 113272746 B	基于刀具更换记录的切削刀具寿命的设置方法、装置和系统

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 116057485 B	用于加工工件的设备和方法
CN 113383174 B	耦接装置
AT 526797 B1	Verfahren zur Bearbeitung eines Rads für ein Schienenfahrzeug und Rad für ein Schienenfahrzeug
CN 115561990 B	用于冗余控制系统的装置
EP 3 729 216 B1	SKILL MATCHING FOR CONTROL OF AN INDUSTRIAL PRODUCTION MACHINE
CN 114815763 B	一种动态控制系统的异常检测方法、装置和计算机可读介质
US 11,928,227 B2	Arrangement for securing a rail vehicle against the actions of unauthorized persons
EP 4 526 178 B1	DEVICE AND METHOD FOR RESPONDING TO LOSS-OF-BRAKE ON A RAILROAD CROSSING GATE MECHANISM
IN 458335 B	METHOD AND DEVICE FOR PRODUCING A PRODUCT, AND COMPUTER PROGRAM PRODUCT
US 11,856,343 B2	Monitoring of high-voltage or medium-voltage equipment
CN 117716684 B	用于传输时间关键数据的方法、通信系统和耦合通信设备
US 12,141,325 B2	Computer-implemented method and system for checking data anonymization
IN 547447 B	AUTHENTICATING A NODE IN A COMMUNICATION NETWORK OF AN AUTOMATION INSTALLATION
SA 18748 B1	نظام وطريقة اتصال لشبكة سكة حديدية
US 12,677,662 B2	Semiconductor module comprising at least one semiconductor element
EP 4 314 962 B1	METHOD AND SYSTEM FOR MANAGING ALARMS IN MODULAR PRODUCTION SYSTEMS
IN 553089 B	METHOD AND ARRANGEMENT TO CONTROL DATA EXCHANGE OF AN INDUSTRIAL EDGE DEVICE
CN 112584951 B	用于通过施加填充有颗粒的不连续的体积元件制造构件的方法
EP 3 925 072 B1	DC VOLTAGE SWITCH
CN 115085964 B	在自动化设施的通信网络中对设备的认证
EP 3 821 582 B1	METHOD FOR SETTING UP A PROOF OF AUTHORIZATION FOR A FIRST DEVICE
US 12,263,871 B2	Rail vehicle for transporting passengers
EP 4 483 310 B1	SYSTEM, APPARATUS AND METHOD FOR MANAGING PLURALITY OF ASSETS
AT 528197 B1	Fahrwerk für ein Schienenfahrzeug und Schienenfahrzeug
IN 564564 B	METHOD AND SYSTEM FOR EMBEDDING A WEB APPLICATION TO BE EMBEDDED IN A SURROUNDING WEB APPLICATION
EP 4 445 472 B1	DISCHARGE SYSTEM AND METHOD FOR DISCHARGING AT LEAST ONE ELECTRICAL STORAGE UNIT
CN 115956240 B	基于增量克隆的数据库升级
US 12,186,611 B2	Fire sprinkler system for building management
CN 112740541 B	保持三相电机的转子的旋转位置的方法和三相电机
EP 3 756 824 B1	TURNING THREAD AUTOMATIC DIAGNOSING METHOD AND SYSTEM, PROGRAM AND STORAGE MEDIUM
CN 111984725 B	分布式数据库中的测量数据集的验证
CN 113220383 B	技术设施的管理系统
US 12,007,452 B2	Locating a ground fault in a DC system
CN 112204482 B	冗余热备控制系统、方法、控制设备及计算机可读存储介质
US 12,554,573 B2	Automatically determining a root-cause indicator of a technical system concerning an output of a machine learning model
EP 4 159 574 B1	RUNNING GEAR FOR A RAIL VEHICLE AND RAIL VEHICLE
EP 4 526 149 B1	MULTI-CONTACT GROUNDING SWITCH FOR A RAIL VEHICLE
CN 118946884 B	用于安全地运行软件组件的方法
CN 114868442 B	用于在两个或更多无线网络之间进行协调的网关设备
US 11,946,825 B2	Device for monitoring a shaft coupling coupling a first shaft to a second shaft
EP 3 922 534 B1	DIRECTION CONTROL FOR A MOTOR OF A GATE CROSSING MECHANISM
EP 4 278 235 B1	SYSTEM AND METHOD FOR MANAGING SENSORS
EP 4 416 472 B1	METHOD FOR OPERATING SWITCHGEAR, AND SWITCHGEAR
DE 10 2022 205 652 B4	Drahtlose Bereitstellung von Informationen aus Schalter-Funktionstests
EP 3 885 854 B1	DATA ANALYSIS METHOD, DEVICE AND SYSTEM
US 12,255,495 B2	Rotor lamination, method for producing a rotor lamination and electric machine
CN 114728515 B	用于自动分离用于3D打印零件的支撑结构的系统和方法
CN 113132111 B	用于技术设施的具有证书管理的控制系统
US 12,640,317 B2	Circuit breaker
EP 4 121 876 B1	METHOD AND ARRANGEMENT FOR EXCHANGING A DOMAIN REGISTRAR FOR AUTHENTICATING AND CONFIGURING DIGITAL CERTIFICATES
EP 3 600 914 B1	WHEELSET FOR VEHICLES
EP 3 765 345 B1	DEVICE FOR CONTROLLED IMPLEMENTATION OF A SECURITY-RELEVANT OPERATION IN RAIL TRAFFIC

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 110465951 B	用于机器人编程的方法、设备、计算机可读存储媒体和计算机程序
EP 4 381 721 B1	NETWORK DEVICE AND METHOD FOR CONNECTING A PLURALITY OF INDUSTRIAL DEVICES
EP 4 515 486 B1	SELF-SUPERVISED ANOMALY DETECTION FRAMEWORK FOR VISUAL QUALITY INSPECTION IN MANUFACTRUING
CN 114919957 B	码垛机的控制方法及码垛机
CN 113383328 B	一种用于高效处理汇集数据的云平台和方法
US 12,516,812 B2	Control and/or regulation of a combustion apparatus
US 12,368,305 B2	Controlling exchanges of energy between a plurality of systems connected to an electrical grid
CN 113508381 B	用于嵌入式软件应用的基于机器学习的异常检测
CN 113454545 B	独立存储校准数据的扩展模块、组件和组件校准方法
EP 4 344 452 B1	ARRANGEMENT AND METHOD FOR AUTOMATICALLY CONFIGURING A MAGNETIC DRIVE
EP 4 371 633 B1	BIG, CUSTOMIZED OBJECTS, METHOD OF PREPARATION OF BIG, CUSTOMIZED OBJECTS
CN 113811905 B	用于提供复杂制造系统的关键性能指标的预测的方法和设备
CN 111971198 B	用于调节车辆的集电弓的设备和方法
CN 114555450 B	用于定位轨道车辆的车轮的装置
US 12,277,377 B2	Efficient scheduling of tasks for resolution enhancement technique operations
EP 4 134 270 B1	CONNECTION ARRANGEMENT BETWEEN OVERHEAD LINES OF AN OVERHEAD SYSTEM
US 12,455,188 B2	Container or platform scales
CN 111656686 B	开关运行模式中运行的场效应晶体管针对过载电流的保护
CN 114174776 B	用于估计电机中有效的电磁力的方法和装置
EP 3 591 482 B1	MONITORING OF A TECHNICAL FACILITY
EP 3 899 298 B1	COUPLING DEVICE
CN 117678251 B	检查针对使用物联网设备中至少一个性能特征的许可的方法和装置及计算机程序产品
AT 528188 B1	Untergestell für ein Schienenfahrzeug
CN 113748580 B	直流电网的负载区中可靠的故障识别和故障定位
EP 3 715 973 B1	ANOMALY DETECTION METHOD AND SYSTEM FOR PROCESS INSTRUMENT, AND PLC
EP 3 893 342 B1	CABLE CONNECTION
EP 4 147 260 B1	CARRIER FOR AT LEAST ONE SWITCHING DEVICE
CN 112840277 B	具有实时数据总线的实时自动化装置
US 12,319,551 B2	Device for lifting loads
CN 114761928 B	识别集成电路芯片中观察到的异常的原因
DE 10 2021 202 916 B4	Anordnung und Verfahren für eine Inbetriebsetzung einer Brandmeldeanlage
EP 4 258 067 B1	SYSTEM AND COMPUTER-IMPLEMENTED METHOD TO GENERATE A CONFIGURATION FOR EXTERNAL DATAPOINT ACCESS
US 12,030,386 B2	Wheel drive module with a wheel received in the wheel drive module
CN 110300967 B	一种数据读取周期的确定方法和装置
CN 115943744 B	电气开关设施的冷却装置以及运行这种冷却装置的方法
EP 3 597 361 B1	TOOLPATH ADJUSTMENTS BASED ON 3-DIMENSIONAL SCAN DATA OF PHYSICALLY MANUFACTURED PARTS
CN 113692589 B	分类模型训练方法、装置和计算机可读介质
EP 4 073 603 B1	OPTIMISATION OF MACHINING OPERATIONS ON MACHINE TOOLS
CA 3188727 C	SYSTEMS AND METHODS FOR HVAC EQUIPMENT PREDICTIVE MAINTENANCE USING MACHINE LEARNING
US 12,436,511 B2	Method and system for semi-automatic completion of an engineering project
US 11,820,238 B2	Current collector for a non-rail-bound, electric traction vehicle, traction vehicle having a current collector of this type and method for operating a current collector of this type
EP 4 292 246 B1	SYSTEMS AND METHODS FOR ANALYZING AND CONTROLLING NETWORK TRAFFIC
CN 112424048 B	用于轨道车辆的轮组中间框架
CN 113795358 B	一种坐标系校准方法、装置和计算机可读介质
CN 113557420 B	基于专家知识的用于旋转机器的自动健康状态分类器
CN 115004201 B	用于改进按订单设计的配置的系统和方法
DE 10 2025 107 758 B3	Computer-implementiertes Verfahren zum Ermitteln von mindestens einem betrachteten Element sowie technisches System und Computerprogrammprodukt
JP 7798769 B2	証明書管理が行われる技術施設用の制御システム
CN 115298789 B	独立于操作者的紧凑式速动开关机构和机电保护开关设备
US 12,566,820 B2	Method and apparatus for classifying data
CN 113647053 B	用于利用至少一个导出密钥配置安全模块的方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115335790 B	用于诊断消息方法和系统
EP 4 650 657 B1	COMBUSTION DEVICE WITH CONTINUOUSLY MODULATING ACTUATOR
EP 4 070 227 B1	COMBINED MICROSTRUCTURE AND OBJECT BOUNDARY REPRESENTATIONS OF COMPUTER-AIDED DESIGN OBJECTS
EP 3 791 336 B1	SYSTEM AND METHOD FOR DETECTING DEFECTS ON IMAGED ITEMS
CN 115268855 B	用于自动生成用于控制机器的行为树程序的方法
IN 505738 B	METHOD FOR PRODUCING A MATERIAL LAYER AND A MATERIAL LAYER STRUCTURE FOR A DYNAMOELECTRIC ROTARY MACHINE
EP 4 312 322 B1	NETWORK CONNECTOR AND CONNECTION
US 12,346,669 B2	Method and system for generating engineering programs for an industrial domain
EP 4 004 794 B1	PERFORMANCE BASED SYSTEM CONFIGURATION AS PREPROCESSING FOR SYSTEM PEFORMANCE SIMULATION
EP 4 067 199 B1	METHOD FOR EVACUATING PASSENGERS FROM A VEHICLE, TERMINAL AND VEHICLE FOR THIS METHOD
KR 102584292 B1	조정 가능한 수의 트랜잭션 블록 및 복수의 중간 블록을 포함하는 블록을 가진 블록체인의 생성
US 12,069,094 B2	Method and device for configuring an access protection system
CN 113169684 B	用于使具有包括晶闸管的软起动器的永磁三相电机电网同步的方法
EP 3 976 317 B1	DEVICE AND METHOD FOR CLEANING THE SURFACES OF THE INSIDES OF PIPES
EP 4 244 957 B1	METHOD FOR INTRODUCING COILS INTO A STATOR OF AN ELECTRIC ROTATING MACHINE AND SHAPING THE COILS IN THE STATOR
US 12,050,478 B2	Conveyor assembly with two conveyor elements connected in parallel
CN 114035623 B	设备往复运动的控制方法、装置和计算机可读介质
CN 112236778 B	使用CAD模型作为先验的从图像中的对象识别
CN 113615086 B	半导体开关的保护
IN 488154 B	SENSOR UNIT FOR DETECTING THE APPROACH OF A TRAIN AND SYSTEM WITH SAID SENSOR UNIT
US 12,646,664 B2	Circuit breaker device and method
IN 481896 B	DIFFERENTIAL PROTECTION METHOD, DIFFERENTIAL PROTECTION DEVICE, AND DIFFERENTIAL PROTECTION SYSTEM
EP 4 275 099 B1	METHOD AND SYSTEMS FOR IDENTIFYING COMPENSATION PARAMETERS
US 11,782,415 B2	Numerical controller having scalable performance
US 12,373,708 B2	Processes and products for generation of completion rules of knowledge graphs
EP 3 910 360 B1	ASSEMBLY WITH A MEASURING DEVICE AND METHOD FOR OPERATING THE SAME
US 12,209,886 B2	System and method for monitoring a failsafe function of sensors in a motor
CN 113568439 B	调姿机的控制方法、装置、控制器和计算机存储介质
CN 115532624 B	电路板检测系统及方法
CN 115389829 B	中性点不接地系统中工作电压的确定方法与装置
US 11,888,362 B2	Method to manufacture an electric machine, installation, vehicle
US 12,237,686 B2	Power distribution method and apparatus
EP 3 844 659 B1	INTERNAL CHANNEL NETWORK DETECTIONS FOR 3D PRINTING
CN 115367024 B	用于提升负载的装置
CA 3067208 C	CONFIGURATION OF FAULT DETECTION AND DIAGNOSTIC RULES IN A BUILDING AUTOMATION SYSTEM
EP 4 098 500 B1	SPRING STORAGE CONTROL DEVICE AND SPRING STORAGE CONTROL METHOD FOR VEHICLE BRAKING DEVICE
EP 4 455 805 B1	SOFTWARE ARCHITECTURE METHOD AND SOFTWARE ARCHITECTURE
CN 115116799 B	系统、断路器、显示器单元和显示器保持器
CN 113785132 B	用于连接轨道车辆的动力总成系统的两个驱动端的装置
US 11,836,423 B2	Machine learning-based clustering for curvilinear layout designs
DE 10 2024 209 544 B3	Abdeckklappe für einen Füllanschluss eines Schienenfahrzeugs mit einem Stopfen zum Einsatz in den Füllanschluss
US 12,416,960 B2	Power converter and trace system for a power converter
EP 3 857 498 B1	METHOD FOR DESIGNING A TRAFFIC INFRASTRUCTURE, ELECTRONIC COMPUTING DEVICE FOR CARRYING OUT A METHOD, COMPUTER PROGRAM, AND DATA CARRIER
US 12,095,401 B2	Dynamic load system and method for simulating a crossing gate mechanism
CN 113518974 B	用于找出并标识网络中的计算节点的系统和方法
JP 7615401 B2	生産システムの自動コントロールのためのシステム、方法および記憶媒体
US 12,427,674 B2	Task-oriented 3D reconstruction for autonomous robotic operations
EP 3 388 902 B1	SAFETY-ORIENTED AUTOMATION SYSTEM
EP 4 213 202 B1	POWER MODULE
CN 115362522 B	用于两阶段成型真空开关装置的触头的方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 149 797 B1	DRIVER SEAT FOR A RAILWAY VEHICLE
EP 3 570 513 B1	INTERNET OF THINGS STRUCTURE WITH A 3D ADAPTION MATRIX
US 12,074,591 B2	Method for actuating a semiconductor power switch, actuation circuit for a semiconductor power switch, and electronic circuit breaker
EP 4 213 174 B1	SINGLE POLE HOUSING MODULE AND LOW VOLTAGE CIRCUIT BREAKER
US 12,253,571 B2	Method, apparatus, and computer program product for determining a residual value of battery storage devices
DE 10 2022 209 203 B3	Verfahren, Schutzgerät und Softwareprogrammprodukt zum Erkennen eines Doppelerdschlusses
US 12,422,836 B2	Diagnosis of technical systems
EP 3 672 065 B1	INVERTER ASSEMBLY FOR AN ELECTRIC MACHINE, ARRANGEMENT WITH AN ELECTRIC MACHINE AND THE INVERTER ASSEMBLY, METHOD FOR OPERATING AN ELECTRIC MACHINE AND COMPUTER PROGRAM
US 12,197,874 B2	Information processing method, and method and apparatus for locating sub-control chart in control chart
CA 3143871 C	ODOMETRIC METHOD, IN PARTICULAR FOR A RAIL VEHICLE OR A CONTROL CENTER
EP 4 173 031 B1	POWER SEMICONDUCTOR MODULE SYSTEM AND METHOD FOR MANUFACTURING A POWER SEMICONDUCTOR MODULE SYSTEM
CN 110162160 B	监控、控制和受监督地关机控制和/或计算机单元的方法
CN 112465288 B	用于自动地捕获技术转移知识的系统和方法
KR 102969519 B1	산업 시스템을 시뮬레이트하기 위한 컴퓨팅 플랫폼 및 시뮬레이션을 관리하는 방법
CN 115039078 B	用于表征和验证轨道车辆的控制软件的方法
CN 117098702 B	具有中间缓冲车钩的轨道车辆
EP 4 014 467 B1	DATA NETWORK HAVING A ONE-WAY GATEWAY
DE 10 2024 209 011 B4	Stromrichtermodul
EP 4 233 084 B1	PROTECTIVE SWITCHING DEVICE AND METHOD
EP 4 476 762 B1	METHOD OF MANUFACTURING A HEAT SINK WITH FINS AND A CIRCUMFERENTIAL SIDEWALL
DE 10 2022 204 950 B3	Verfahren zur Lokalisierung eines Kurzschlusses in einem Gleichspannungssystem sowie elektrische Anlage
CN 113382394 B	设备配置
CN 111930081 B	用于监控AGV状态的方法、装置、边缘设备和存储介质
CN 113641239 B	用于沉浸式人机交互的方法
CN 113454546 B	PLC梯形图编程环境中的程序模块调用方法和装置
US 12,554,913 B2	Machine learning-based down selection of candidate hotspot locations of circuit designs
CN 116802106 B	用于轨道车辆的固持接口和缓冲系统
EP 3 957 033 B1	COMPUTING SYSTEM AND METHOD FOR OPERATING A COMPUTING SYSTEM
EP 4 084 888 B1	FIBRE MATERIAL FOR ANTIBACTERIAL AND/OR ANTIVIRAL USE, FILTER, MOUTH/NOSE PROTECTION AND INSERT FOR USE IN MOUTH/NOSE PROTECTION
US 11,916,857 B2	Hyperlink messages for machine-to-machine communication on a machine social media platform
EP 4 097 948 B1	METHOD FOR DATA TRANSFER AND COMMUNICATION SYSTEM
IN 586402 B	METHOD AND SYSTEM FOR SEAMLESS TRANSITION OF RUNTIME SYSTEM FROM CONTROLLER DEVICE TO DIGITALIZATION PLATFORM
IN 560600 B	SYSTEMS AND METHODS TO DETECT DIRT LEVEL OF FILTERS
CN 111712822 B	基于知识图自动生成、分析和探索系统的可组合系统的交互式框架
US 12,411,405 B2	Optical proximity correction based on combining inverse lithography technology with pattern classification
US 12,547,136 B2	Control platform for exchanges of energy between a plurality of energy systems and energy exchange system
JP 7717192 B2	モジュール式の生産設備でアラームを管理するための方法およびシステム
US 11,970,191 B2	Track-conditioning unit with device for rail drying
EP 4 119 378 B1	WHEEL DRIVE MODULE FOR STEERING AND DRIVING A WHEEL
EP 3 911 498 B1	MONITORING AND PROCESS CONTROL OF AN ADDITIVE PRODUCTION OF A WORKPIECE
EP 4 200 677 B1	A METHOD AND A DATA PROCESSING SYSTEM FOR MULTI-STATE SIMULATION FOR VALIDATING THE SAFETY OF AN INDUSTRIAL SCENARIO
US 12,683,998 B2	Attestation of a cloud-based execution environment for project planning
EP 3 791 557 B1	SYSTEM FOR DATA ANALYTICS USING A LOCAL DEVICE AND A CLOUD COMPUTING PLATFORM
US 12,693,642 B2	Building automation network
CN 109598006 B	调整产品模型的方法、装置和存储介质
EP 4 315 074 B1	COMPUTER-IMPLEMENTED METHOD FOR UPDATING A MODEL PARAMETER FOR A MODEL
IN 585188 B	DETECTING MANIPULATED CLIENTS IN A CONTROL SYSTEM
EP 3 971 829 B1	CUTTING METHOD, APPARATUS AND SYSTEM FOR POINT CLOUD MODEL

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115675568 B	一种利用计算机辅助的评估对轴计数的方法
IN 483027 B	CONTROL ROD WITH COMPENSATION ELEMENT
US 12,409,556 B2	Projecting safety-related monitoring for a multi-axis kinematic system with multiple movable segments
EP 3 444 761 B1	SYSTEMS, APPARATUS, AND METHODS FOR CONTROLLING GENERATING ASSETS, FLEXIBLE LOADS AND/OR STORAGE ASSETS TO SUPPORT DYNAMIC REGULATION
US 11,789,713 B2	Method and system for determining in which technological layer a module of a MOM application is to be deployed
EP 3 871 946 B1	THERMAL LOCKOUT FOR A MOTOR OF A GATE CROSSING MECHANISM
EP 3 681 779 B1	METHOD, WAYSIDE EQUIPMENT MODULE AND SUBSYSTEM FOR A TRAIN CONTROL SYSTEM
CN 114258548 B	用于为工程方案的完成提供推荐的方法和装置
US 12,504,983 B2	Supervisory device with deployed independent application containers for automation control programs
EP 4 128 671 B1	METHOD FOR OPERATING A COMMUNICATION SYSTEM FOR TRANSFERRING TIME-CRITICAL DATA, SWITCH AND COMMUNICATION SYSTEM
US 11,805,099 B2	Computing system and method for operating a computing system
EP 4 558 373 B1	CONTROL OF RUNNING-GEAR HEIGHT BY MEANS OF PASSENGER BOARDING SENSOR
US 12,632,622 B2	Automatic generation of bill of process from digital twin using exploratory simulation
EP 4 526 177 B1	METHOD FOR CARRYING OUT AN EMERGENCY STOP FOR A TRAIN
DE 10 2018 200 583 B4	Wandverkleidungssystem mit einem flächigen Wandverkleidungselement
EP 4 211 478 B1	OUTPUT MODULE AND METHOD FOR OPERATION
CN 111475998 B	延迟获取远程资源的电子设计自动化(EDA)过程的混合执行
CN 115883092 B	授权的方法、授权服务器、资源服务器和客户端设备
CN 114843123 B	远程驱动器、具有远程驱动器的装置布置以及方法
CN 116210002 B	防伪机器部件的制造方法
EP 4 522 901 B1	BATTERY COOLANT DISTRIBUTION SYSTEM
EP 4 508 884 B1	ESTABLISHMENT AND DISCOVERY OF AN APPLICATION-RELATED DEFAULT PROTOCOL DATA UNIT SESSION IN 5G NETWORKS
DE 10 2022 203 609 B4	Verfahren zum Betreiben einer elektrischen Antriebsvorrichtung
US 12,189,651 B2	Computer-implemented method for storing data using a distributed transaction database, computer program product, and network
US 11,853,052 B2	Cluster based classification for time series data
EP 4 185 981 B1	MACHINE LEARNING-BASED GENERATION OF CONSTRAINTS FOR COMPUTER-AIDED DESIGN (CAD) ASSEMBLIES
KR 102893267 B1	레일 팽창 디바이스 및 방법
CN 113646999 B	电机
US 12,565,995 B2	Closed-loop control of a combustion apparatus
CN 118715509 B	工作流生成方法、装置、系统、介质及程序产品
EP 4 040 245 B1	METHOD, COMPUTER-IMPLEMENTED-TOOL, CONTRAPTION AND CONFIGURATION ARRANGEMENT FOR CONFIGURING A DEVICE TO BE COMMISSIONED OF A SET OF DEVICES FOR COMMISSIONING WITH A TECHNICAL OR CYBER-PHYSICAL SYSTEM
EP 4 359 877 B1	METHOD AND SYSTEM FOR IMPROVING THE PRODUCTION PROCESS OF A TECHNICAL SYSTEM
CN 113646658 B	一种用于计算机实现的模拟雷达原始数据的方法
EP 3 820 759 B1	LED-SIGNALING DRIVING METHOD, LED-SIGNALING DEVICE AND TRAFFIC SYSTEM
EP 4 341 800 B1	UPDATING A DEPLOYED APP METHOD AND SYSTEM
IN 587950 B	COMPRESSED-AIR SUPPLY ARRANGEMENT FOR A TRAIN ASSEMBLY
KR 102695799 B1	적어도 3개의 파워 유닛들을 구비한 파워 모듈
AU 2023287321 B2	SENSOR, AND RAILWAY TRACK SYSTEM COMPRISING A SENSOR
EP 3 931 062 B1	RAIL VEHICLE CARRIAGE COMPRISING A CONTAINER FOR HOUSING ELECTRICAL DEVICES
CN 113826369 B	对计算机系统进行入侵识别的分析设备、节点和系统
IN 543051 B	METHOD, DEVICE AND SYSTEM FOR RECOGNIZING AN ELECTRICAL OSCILLATION IN AN ELECTRICAL POWER SUPPLY SYSTEM
US 12,623,701 B2	Automatic arming of a head-of-train device to an end-of-train device
EP 3 921 995 B1	METHOD, SYSTEM, RECEIVING NODE AND COMPUTER PROGRAM PRODUCT FOR TRANSFERRING DATA PACKETS
US 11,845,341 B2	Operation of switching elements of an inverter of an in particular rail-bound vehicle driven by way of least one at least three-phase synchronous machine
JP 7362699 B2	有限要素メッシュの修正方法
EP 3 877 117 B1	AUTOMATED SYSTEM INCLUDING REACHABILITY ANALYSIS
EP 4 057 091 B1	COMPUTER-IMPLEMENTED METHOD FOR GENERATING A COMPONENT FAULT AND DEFICIENCY TREE OF A MULTI-COMPONENT SYSTEM COMPRISING A PLURALITY OF COMPONENTS
CN 113474735 B	用于运行数控制造机器的方法和相应的数控装置

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 869 428 B1	VALIDATING ATTRIBUTES OF A PRODUCT
US 12,425,420 B2	Method and system for anomaly detection in a network
CN 116134390 B	至少双轴的机床的运行
DE 10 2023 209 308 B4	Zustandsbasierte Frostentleerung für ein Schienenfahrzeug
EP 4 097 947 B1	DISTRIBUTION METHOD FOR LICENSES TO ELECTRONIC PARTS
EP 4 278 568 B1	PROTECTING A DEVICE AGAINST A CYBER INCIDENT
DE 10 2023 203 673 B3	Aufnahmeanordnung für einen Container für ein Schienenfahrzeug
US 12,683,702 B2	Determining a residence time in a portion of a network
EP 4 237 923 B1	ASSISTANCE APPARATUS AND METHOD FOR AUTOMATICALLY IDENTIFYING FAILURE TYPES OF A TECHNICAL SYSTEM
CN 112335268 B	用于建立和/或提供工作环境、尤其是在机器经济环境中使用的装置和方法
CN 114207617 B	识别控制系统的被操纵的客户端
JP 7686889 B2	ターゲットを検出する方法、ターゲットを検出する装置、電子デバイスならびにコンピュータ記憶媒体
EP 3 588 206 B1	A SAFE GUARD DETECTION FOR UNEXPECTED OPERATIONS IN A MES SYSTEM
EP 4 466 217 B1	LOAD BALANCING DEVICE FOR A LIFTING APPLICATION WITH AN ARTICLE TO BE LOWERED OR RAISED
DE 10 2022 213 021 B3	Überwachen einer Schaltanlage
EP 3 814 862 B1	ASSEMBLY AND METHOD FOR FORECASTING A REMAINING USEFUL LIFE OF A MACHINE
EP 4 385 051 B1	MANUFACTURING METHOD FOR A CONTACT BODY OF A VACUUM INTERRUPTER, CONTACT BODY FOR A VACUUM INTERRUPTER AND VACUUM INTERRUPTER COMPRISING SUCH A CONTACT BODY
CN 114142711 B	具有优化的拓扑结构的多级变流器
EP 4 444 595 B1	ARRANGEMENT FOR THE TRANSMISSION OF PROCESS DATA
EP 4 268 552 B1	COOLING DEVICE FOR COOLING A SEMICONDUCTOR MODULE AND CONVERTER WITH THE COOLING DEVICE
CN 112106024 B	用于在机床的边缘计算设备上部署工业应用的方法和平台
CN 113906643 B	检测直流电网中的接地故障
US 11,989,111 B2	Handling trace data for jumps in program flow
US 12,534,107 B2	Method to operate a vehicle, method to test an autonomous driving system, system with a vehicle
CN 116113862 B	用于实现工业相机对焦的方法和装置
US 11,991,252 B2	Methods, devices, systems, and non-transitory machine-readable storage mediums for configuring parameter sampling of devices
EP 3 872 511 B1	A NEW TYPE OF ARC FAULT DETECTION DEVICE (AFDD) AND ITS DETECTION METHOD
AT 528407 B1	Schienenfahrzeugwagenkasten
GB 2595485 B	Hardware-based sensor analysis
US 12,456,868 B2	Method for operating an energy system, and energy system
EP 4 013 656 B1	INTEGRAL FASTENING FOR A THERMAL INSULATION LAYER IN A RAIL VEHICLE
US 11,960,858 B2	Performance based system configuration as preprocessing for system peformance simulation
EP 4 205 190 B1	METHOD AND SYSTEM FOR MANUFACTURING ELECTRONIC ASSEMBLIES WITH A PRESSURE DEVICE
JP 7406469 B2	集積回路チップデバイスにおけるメッセージのルーティング
US 12,314,730 B2	Computer implemented method and distributed computing infrastructure for automated plug and play configuration
CN 111480125 B	保护用于制造产品的生产数据的方法
US 11,964,684 B2	Controlling a level crossing and railway control arrangement
US 12,132,526 B2	Radio frequency loss based sensor management
US 12,018,961 B2	Signaling device
US 12,524,270 B2	Computing platform for simulating an industrial system and method of managing the simulation
US 12,354,825 B2	Circuit breaker device and method
EP 4 551 443 B1	METHOD FOR ENSURING THE STANDSTILL OF A RAIL VEHICLE
KR 102778118 B1	흐름 제어 환경에 의해 시간-임계 서비스들을 제공하기 위한 방법 및 시스템
EP 3 707 655 B1	A METHOD AND APPARATUS FOR DYNAMICALLY OPTIMIZING INDUSTRIAL PRODUCTION PROCESSES
EP 3 869 762 B1	DATA TRANSMISSION WITH COMMUNICATION BROKER
EP 3 702 981 B1	RESOURCE MANAGEMENT AT PLAN CHANGE
EP 4 158 688 B1	POWER MODULE AND DEVICE FOR COOLING A POWER MODULE
IN 487954 B	SYSTEM, APPARATUS AND METHOD OF DETERMINING REMAINING LIFE OF A BEARING
EP 4 283 925 B1	METHOD FOR SECURE TRANSMISSION OF TIME-CRITICAL DATA WITHIN A COMMUNICATION SYSTEM AND COMMUNICATION SYSTEM
US 12,456,184 B2	Use of an HDR image in a visual inspection process

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115427174 B	工艺光的辐射强度和/或波长的确定
CN 112560373 B	毛刺功率分析和优化引擎
EP 3 794 769 B1	MODIFYING THE CONTENTS OF A ROOT CERTIFICATE STORAGE
GB 2622872 B	Trackside worker warning method
US 12,066,068 B2	Brake module of a wheel module having a wheel drivable about a wheel axis by a drive module and indefinitely steerable about a steering axis
EP 4 010 766 B1	METHOD FOR GENERATING A DIGITAL TWIN OF A SYSTEM OR DEVICE
AT 526054 B1	Fahrwerk für ein Schienenfahrzeug und Schienenfahrzeug
US 12,449,972 B2	Intelligent device extension for building software applications
US 11,835,932 B2	Room device configuration using near field communication
US 12,548,725 B2	Device for switching a handle of an electrical switch, and multi-function drive having a device of this type
EP 4 007 099 B1	FIRE PROTECTION SWITCH FOR IDENTIFYING ARCING FAULTS
CN 114977615 B	用于旋转的轴的轴承套、轴承盖、电动机制造减振元件的方法
CN 113556221 B	冗余网络中校时的方法及装置
CN 114278781 B	用于风门旋转驱动器的轴容纳件和风门旋转驱动器
EP 4 204 909 B1	EDGE DEVICE, METHOD AND PROGRAM FOR PROVIDING REDUNDANCY FUNCTIONS ON AN EDGE DEVICE
US 12,028,708 B2	Method and system for authorizing the communication of a network node
IN 493528 B	METHOD AND SYSTEM FOR MONITORING THE OPERATION OF AT LEAST ONE DRIVE COMPONENT
US 12,438,501 B2	Method for power control
US 12,380,013 B2	Method and apparatus for determining collection frequency of a monitoring device
US 12,520,438 B2	Housing and electrical appliance
CN 113826181 B	优化的三位开关
US 11,914,338 B2	Redundant automation system and method for operating the redundant automation system
EP 3 818 562 B1	POWER MODULE UNIT, METHOD FOR PRODUCING A POWER MODULE UNIT, POWER SUPPLY AND FREQUENCY CONVERTER
IN 589963 B	METHOD FOR DETERMINING A LOSS OF CAPACITY OF A BATTERY STORAGE DEVICE, APPARATUS AND COMPUTER PROGRAM PRODUCT
CN 114127572 B	用于探测在构件、尤其是电力电子设备的功率模块以及电力电子设备、尤其是变流器上的与老化相关的损伤或分层的方法和装置
EP 4 399 485 B1	AUTOMATED AERIAL DATA CAPTURE FOR 3D MODELING OF UNKNOWN OBJECTS IN UNKNOWN ENVIRONMENTS
SG 11202202184 B	COMMUNICATION SYSTEM AND METHOD FOR A RAILWAY NETWORK
EP 3 904 827 B1	DYNAMIC ROUTE PLANNING OF A DRONE-BASED INSPECTION OF ROUTE EQUIPMENT OF A ROUTE
EP 4 364 013 B1	METHOD FOR ASSIGNING A DIGITAL MODEL TO A PHYSICAL COMPONENT OF AN AUTOMATION SYSTEM, AUTOMATION SYSTEM AND MANUFACTURING PLANT
EP 4 448 324 B1	BATTERY SYSTEM FRAME, HOUSING AND METHOD FOR RECEIVING AT LEAST ONE FIRST AND AT LEAST ONE ADJACENT SECOND BATTERY MODULE IN A VEHICLE FOR FORMING A BATTERY SYSTEM
US 12,184,188 B2	Determining synchronous rectification on-time of CLLC converter
CN 115366105 B	工件抓取方法、装置、电子设备和存储介质
EP 4 054 887 B1	RAIL VEHICLE HAVING A COOLING AND AIR CONDITIONING ASSEMBLY
EP 4 143 725 B1	SECURE DATA EXTRACTION FROM COMPUTING DEVICES USING UNIDIRECTIONAL COMMUNICATION
CN 113853724 B	四极同步磁阻马达
EP 4 109 194 B1	SENSOR DATA GENERATION FOR CONTROLLING AN AUTONOMOUS VEHICLE
US 12,230,959 B2	Method for operating an energy management system, electronic computing device for carrying out the method, computer program, and data carrier
US 12,571,670 B2	Diagnostic method for a flow measurement apparatus with effective pressure lines with vibration measurement
CN 112424782 B	用于运行软件定义的网络的设备、系统和方法
JP 7765652 B2	マイクロサービスオーケストレーション方法および装置、電子デバイス、ならびに可読媒体
US 11,960,932 B2	Target distribution of resources determined on a basis of an optimization parameterization
JP 7771366 B2	アプリ、特にイベントアーティファクトを含むアプリ開発の管理、方法およびシステム
EP 4 179 425 B1	METHOD FOR TRANSMITTING A SOFTWARE APPLICATION FROM A FIRST TO A SECOND DATA PROCESSING DEVICE
US 12,034,350 B2	Electrical machine with electric motor and magnetic gear
US 12,167,240 B2	Method for configuring a radio connection
US 12,437,128 B2	Designing, configuring and maintaining a drive device
CN 113958619 B	组装一个或多个轴承的方法和装置
EP 3 937 285 B1	METHOD FOR OPERATING A FUEL CELL SYSTEM IN A TRAIN

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,355,612 B2	Computer-implemented method for operating a terminal with high availability in a network
US 11,954,535 B2	Systems, devices, and methods for execution of tasks in an internet-of-things (IOT) environment
US 11,991,146 B2	Method and transmission device for data transmission between two or more networks
JP 7861106 B2	製品設計のメタデータ予測
US 11,904,911 B2	Track-guided vehicle, arrangement for cooling an energy storage device of the track-guided vehicle, and method for controlling the arrangement
JP 7646838 B2	材料層、電気機械の材料層積層体および材料層の製造方法
US 12,057,745 B2	Cooling-optimised housing of a machine
CN 112673576 B	数据压缩方法、数据恢复方法及装置
EP 4 356 646 B1	METHOD OF PERFORMING A HANDOVER OF A MOBILE NETWORK DEVICE
EP 4 254 097 B1	INDUSTRIAL PLANT AND METHOD FOR GRAPHICAL REPRESENTATION OF SYNCHRONISM
IN 590688 B	METHOD FOR MOVING A LOAD WITH A CRANE IN A COLLISION-FREE MANNER
EP 4 335 128 B1	LICENCE VERIFICATION FOR USE OF AT LEAST ONE FEATURE IN AN INTERNET OF THINGS (IOT) DEVICE
EP 4 341 995 B1	POWER ELECTRONICS ASSEMBLY
EP 4 377 984 B1	CIRCUIT BREAKER DEVICE AND METHOD
FR 3 149 986 B1	Méthode pour tester une continuité électrique d'un bus d'alimentation d'un système de mise en sécurité et système de mise en sécurité correspondant
CN 114930290 B	用于管理对资产操作进行管理的应用程序的系统、设备、方法和数据栈
EP 4 049 430 B1	TRANSMISSION DEVICE FOR THE TRANSMISSION OF DATA
EP 3 980 735 B1	METHOD AND APPARATUS FOR ESTIMATING ELECTROMAGNETIC FORCES ACTIVE IN AN ELECTRIC MACHINE
US 12,183,710 B2	Method for producing conductive tracks, and electronic module
EP 3 949 279 B1	ALARM ISSUE MANAGEMENT FOR A BUILDING MANAGEMENT ENVIRONMENT
CN 113039499 B	通过自主机器支持任务的对象标记
EP 3 602 432 B1	FLEXIBLE PRODUCT MANUFACTURING PLANNING
EP 4 389 556 B1	VEHICLE WITH ADJUSTING DEVICE FOR LIFTING AND LOWERING A CAR BODY RELATIVE TO THE CHASSIS
US 12,204,320 B2	Assigning tools to spaces in a tool magazine
CN 115417316 B	起重机的控制方法、控制系统、控制装置和计算机可读存储介质
AU 2021375339 B2	SELECTIVE RAPID DISCONNECTION OF A CHARGING DEVICE
EP 4 224 450 B1	THREAT SAFETY SYSTEM AND METHOD
CN 115989496 B	用于模拟工业系统的计算平台和管理模拟的方法
US 12,595,886 B2	Control of a water supply system using pumping stations with resource optimized pressure and flow target values
CN 115699009 B	用于使用机器学习模型生成几何组件的方法和系统
EP 4 086 640 B1	UNIVERSAL MEASURING INPUT FOR CONNECTING A SMALL SIGNAL CONVERTER AND ELECTRICAL APPARATUS WITH SUCH A MEASURING INPUT
CN 114817844 B	高斯混合模型的隐变量确定方法及装置、设备、介质
CN 116157774 B	用于在云计算环境中提供工业设备的工程的方法和系统
CN 114174006 B	机器人手眼标定方法、装置、计算设备、介质以及产品
US 12,242,241 B2	Method and apparatus for designing and manufacturing a component in a computer-aided design and manufacturing environment
CN 116553260 B	前馈控制方法、前馈控制器和张力控制系统
US 11,765,308 B2	Visualization device and method for visualizing the interior or exterior of a vehicle
CN 113196636 B	用于运行供电装置的方法以及供电装置
EP 4 345 512 B1	MONITORING DEVICE AND METHOD FOR MONITORING AN OPENING
EP 3 902 097 B1	METHOD AND ARRANGEMENT FOR DETECTING A TOPOLOGY IN A LOW VOLTAGE NETWORK
AT 521877 B1	Verfahren und Vorrichtung zur Detektion eines Entgleisungszustands eines Schienenfahrzeugs
US 12,164,291 B2	Separation of states of mechanical presses by analyzing trained patterns in a neural network
CN 114365412 B	用于确定同步磁阻电机的饱和特性的方法和设备
BR 102022008554 B1	ITEM DE EQUIPAMENTO ELÉTRICO, E, MÉTODO PARA IDENTIFICAR FALHAS EM UM ITEM DE EQUIPAMENTO ELÉTRICO
CN 112560374 B	集成的仿真器与分析和优化引擎
EP 3 964 846 B1	ARRANGEMENT WITH A TENSION MODULE
CN 115897063 B	铺网机的铺网控制方法、装置和计算机可读介质
CN 117063457 B	用于配置应用的方法和装置
CN 114620289 B	饮料灌装机、其容器运动控制方法和容器运动控制机构

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 913 382 B1	METHOD AND DEVICE FOR DETERMINING THE LOCATION OF A THREE-POLE ASSYMETRICAL FAULT ON A LINE OF A THREE-PHASE ELECTRICAL ENERGY SUPPLY NETWORK
US 12,003,621 B2	Method for managing keys of a security group
US 12,203,511 B2	Coupling device
CN 114118661 B	用于半自动生成生产模块的机器可读技能描述的方法和系统
DE 10 2021 208 028 B4	Stromabnehmer und ein mit einem solchen ausgestattetes Straßenfahrzeug
EP 3 956 168 B1	ACTUATION DEVICE FOR A PUBLIC TRANSPORT VEHICLE
US 11,934,507 B2	Project-oriented certificate management
CN 113711312 B	用于处理存储器修复信息的方法和装置
CN 111279276 B	用于控制复杂系统的随机化加强学习
CN 116457740 B	用于自动生成传感器数据的时间序列的训练数据的辅助设备和方法
EP 4 306 912 B1	COMBUSTION DEVICE WITH MASS FLOW SENSOR
EP 4 154 026 B1	METHOD FOR DETERMINING THE STATE OF AN ELECTRICAL SWITCHGEAR, MONITORING UNIT FOR AN ELECTRICAL SWITCHGEAR, AND ELECTRICAL SWITCHGEAR
US 11,967,434 B2	Systems and methods for multi-dimensional fluid modeling of an organism or organ
EP 4 193 225 B1	METHOD AND SYSTEM FOR PROVIDING ENGINEERING OF AN INDUSTRIAL DEVICE IN A CLOUD COMPUTING ENVIRONMENT
CN 114830609 B	调度通过电信网络的传输
EP 3 956 802 B1	METHOD AND SYSTEM FOR PROVISIONING SIMULATION MODEL GENERATION IN A CLOUD COMPUTING ENVIRONMENT
EP 3 851 928 B1	A SYSTEM FOR DATA TRANSMISSION BETWEEN A CLIENT DEVICE, A SERVER DEVICE AND A PLURALITY OF AUTOMATION DEVICES
CN 116923489 B	生成列车控制指令的方法、装置、控制系统、设备及介质
CN 115917333 B	具有霍尔传感器的电流测量设备
CN 112868218 B	用于提供冗余的中继器的方法、系统和计算机可读的介质
EP 4 470 873 B1	METHOD AND DEVICES FOR OPERATING RAILWAY VEHICLES
EP 3 938 671 B1	DRIVE TRAIN OF RAILWAY VEHICLE
US 12,341,127 B2	Semifinished product for populating with components and, method for populating same with components
US 11,841,701 B2	Load management for displaying an alarm signal indicator
EP 3 914 980 B1	METHOD AND SYSTEM FOR QUALITY CONTROL IN INDUSTRIAL PRODUCTION
US 12,005,945 B2	Highway grade crossing gate system including a gate mechanism to rotate a gate arm with human machine interface and voltage reduction circuit
CN 113396418 B	基于图案-失效率模拟的管芯良率评估
US 12,505,275 B2	Communication protocols design verification through database systems for hardware-based emulation platforms
BR 102019019929 B1	SISTEMA DE CONVERSÃO DE ENERGIA ELÉTRICA
US 11,946,978 B2	Method, apparatus and computer program product for estimating the service life of battery storage systems
CN 111934341 B	一种用于光伏系统的控制的方法和电力系统
US 12,670,578 B2	Layout-based wafer defect identification and classification using separately generated predicted images and predicted layout designs
IN 581724 B	A METHOD FOR TRANSFORMING A DATA MODEL FOR AUTOMATION PURPOSES INTO A TARGET ONTOLOGY
EP 4 571 808 B1	SWITCHING DEVICE, CONTROL METHOD FOR SWITCHING DEVICE AND COMPUTER-READABLE MEDIUM
US 12,158,745 B2	Method and apparatus for cycle-based programming of a control program for a numerically controlled machine tool
US 12,659,698 B2	Automated electric vehicle supply equipment (EVSE) group commissioning system and method
EP 4 343 260 B1	HEAT PIPE COOLING BODY FOR PULSATING OPERATION AND METHOD FOR PRODUCING SUCH A HEAT PIPE COOLING BODY
US 12,535,237 B2	System and method for controlling a multi-zone dual deck air handling unit
EP 4 479 900 B1	GENERATING TRAINING DATA TO TRAIN A MACHINE LEARNING MODEL APPLIED FOR CONTROLLING A PRODUCTION PROCESS
DE 10 2021 205 348 B4	Schaltanlage mit einem fluiddichten Gehäuse
EP 4 072 099 B1	SYSTEM AND METHOD FOR EXCHANGING DATA BETWEEN A SERVER AND A CLIENT IN AN INDUSTRIAL DATA NETWORK
US 12,543,030 B2	Radio unit for providing network connectivity to one or more user equipment onboard a vehicle
US 12,417,325 B2	Sensitivity analysis-based dependability trade-off analysis
US 12,333,649 B2	Method of bounding spatial data utilizing three-dimensional axis-aligned bounding boxes
IN 556795 B	DEVICE AND METHOD FOR MANAGING COMMUNICATIONS
EP 4 136 525 B1	INDUSTRIAL APPLICATION PACKAGE MANAGEMENT
EP 4 405 762 B1	METHOD FOR OPERATING A DEVICE IN AN IOT SYSTEM
US 12,403,941 B2	Assembly for increasing the load-bearing capacity of a structural component of a rail vehicle
CN 113796010 B	功率半导体的适应性开关速度控制

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115483049 B	银石墨触头的制备方法及制备系统
CN 114556745 B	转子片、制造转子片的方法和电机
IN 590889 B	CIRCUIT BREAKER
DE 10 2025 100 119 B4	Elektrisches Verbinden zweier Bauteile
DE 10 2023 205 169 B4	Kabelmanagement für Ladestationen von Fahrzeugen
EP 3 884 347 B1	COLLISION DETECTION BASED ON HIGH QUALITY GEOMETRY
CN 113383476 B	直流电压开关
US 12,591,217 B2	Method and system for providing recommendations concerning a configuration process
CN 113972081 B	固定装置和串联安装设备
US 11,831,269 B2	Method for controlling two electric motors
IN 574079 B	METHOD AND SYSTEM FOR TRANSMITTING SOFTWARE ARTIFACTS FROM A SOURCE NETWORK TO A TARGET NETWORK
CN 115362419 B	机床上切削过程的优化
EP 4 134 883 B1	SYSTEMS AND METHODS FOR AUTOMATED X-RAY INSPECTION
EP 3 979 283 B1	MOTOR STARTER, OPERATING METHOD, COMPUTER PROGRAM PRODUCT AND MOTOR STARTER ASSEMBLY
KR 102875380 B1	산업용 자동화 장치를 위한 업데이트된 애플리케이션의 운영 개시를 위한 방법 및 장치
EP 4 037 950 B1	BATTERY RECEPTACLE FOR A RAIL VEHICLE
BR 112021000341 B1	Dispositivo receptor, dispositivo de envio, sistema, método para a recepção de mensagens auxiliado por computador, método para o envio de mensagens auxiliados por computador e dispositivo provedor
EP 3 914 498 B1	METHOD AND DEVICE FOR OPERATING A VEHICLE WITH A PLURALITY OF EXTERNAL DOORS FOR SEPARATING A PASSENGER AREA WITHIN THE VEHICLE FROM AN EXTERNAL SURROUNDING AREA OF THE VEHICLE
EP 3 625 873 B1	STATOR-HOUSING UNIT FOR AN ELECTRIC MACHINE
IN 548667 B	NETWORK DISTRIBUTION USING COMMON COMMUNICATION AND POWER
US 12,405,935 B2	Data fusion method and apparatus based on knowledge graph, and electronic device
KR 102809577 B1	생산 시스템 자동 제어를 위한 시스템, 방법 및 저장 매체
EP 3 778 345 B1	METHOD FOR OPERATING A VEHICLE AND RAIL OPERATION FACILITY
EP 4 276 480 B1	METHOD AND DEVICE FOR DETECTING A SINGLE PHASE GROUND FAULT
EP 4 137 898 B1	CONTROL DEVICE FOR A CNC CONTROL SYSTEM
US 12,236,166 B2	Method of operating a cad system model for modelling an article to be manufactured
EP 4 670 456 B1	METHOD FOR OPERATING AN INDUSTRIAL EDGE CLOUD WIRELESS SYSTEM WITH ONE OR MORE BASE RADIO STATIONS, AND BASE RADIO STATION AND TERMINAL
EP 3 961 334 B1	METHOD FOR MODELLING A COMPONENT FAULT TREE FOR AN ELECTRICAL CIRCUIT
EP 3 798 088 B1	METHOD AND ARRANGEMENT FOR DISTRIBUTING PERSONS IN A PASSENGER TRAIN
EP 4 010 215 B1	METHOD FOR OPERATING A RAIL VEHICLE AND RAIL VEHICLE
EP 3 880 535 B1	AIR-CONDITIONING ASSEMBLY FOR A RAIL VEHICLE
CN 115280094 B	用于得出热交换器的污垢的方法和设备
US 12,594,975 B2	Carrier assembly for a chassis of a rail vehicle
US 12,620,078 B2	Method for the automated support of an inspection and/or condition monitoring of objects of a production system
CN 118475886 B	用于提供时间关键的控制应用的方法和系统
EP 4 514 646 B1	ROAD VEHICLE WITH CURRENT COLLECTOR
EP 3 959 755 B1	ENERGY STORAGE DEVICE AND VEHICLE
US 11,979,005 B2	Multi-family metering device with modular meter compartments
US 12,319,324 B2	Method and device for detecting a derailed state of a rail vehicle
US 11,868,115 B2	Operating an at least two-axle machine tool
US 12,130,614 B2	Field device energy management unit
US 12,547,839 B2	Method for analyzing data including a large number of individual messages, computer program product, and computer system
AT 527420 B1	Verfahren und Vorrichtung zur Bearbeitung eines Rads für ein Schienenfahrzeug
EP 3 973 305 B1	METHOD AND APPARATUS FOR DETECTING AGE-RELATED DAMAGE OR DELAMINATION ON COMPONENTS, IN PARTICULAR POWER MODULES OF POWER ELECTRONIC DEVICES, AND POWER ELECTRONIC DEVICE, IN PARTICULAR CONVERTER
US 12,456,361 B2	Central fire alarm system
EP 4 100 803 B1	METHOD AND DEVICE FOR OPERATING A MACHINE WITH A TOOL
EP 4 193 297 B1	METHOD AND SYSTEM FOR IDENTIFYING OBJECTS
US 12,257,716 B2	System for guiding the movement of a manipulator having a first processor and at least one second processor
US 12,466,269 B2	Absorption circuit arrangement for a traction converter of a rail vehicle

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 116324735 B	基于真实世界场景验证软件驱动系统
CN 114175599 B	用于楼宇管理环境的警报问题管理
EP 3 882 762 B1	METHOD FOR INSTALLING NEW SOFTWARE AND SYSTEM
US 12,510,882 B2	Method for controlling a plurality of execution mechanisms, electronic device, and storage medium
US 12,371,075 B2	Assembly for positioning a wheel of a rail vehicle
EP 3 912 029 B1	ADAPTIVE USER INTERFACES FOR COMPUTER-AIDED TECHNOLOGY APPLICATIONS
CN 112586034 B	移动平台上网络中的预期切换
EP 4 371 078 B1	PROCESSING PIPELINES FOR GENERATION OF FACETED OBJECT REPRESENTATIONS FROM VOXEL DATA
EP 4 264 436 B1	GENERATING UNKNOWN-UNSAFE SCENARIOS, IMPROVING AUTOMATED VEHICLES, COMPUTER SYSTEM
EP 4 270 227 B1	METHOD AND SYSTEM FOR ANOMALY DETECTION IN A NETWORK
CN 113849264 B	用于编排终端设备上的基于容器的应用的方法
CN 114830610 B	电信网络中的干扰抑制
US 12,021,373 B2	Operating a load zone on a power grid
CN 114667656 B	混合断路器、混合断路系统及断路方法
CN 114830711 B	用于测试基站的设备
US 11,886,788 B2	Duplicate circuit section identification and processing for optical proximity correction (OPC) processes in electronic design automation (EDA) applications
US 12,044,549 B2	Optical reading device for a pointer instrument
EP 3 617 824 B1	SYSTEM, APPARATUS AND METHOD OF MANAGING AN ASSET USING AN ASSET MODEL
US 12,643,585 B2	Traffic network and method for operating rail vehicles in a traffic network consisting of a combination of line sections with train protection and line sections without train protection
CN 115885284 B	电子设计自动化 (EDA) 应用中基于机器学习的热点预测
US 11,917,027 B2	Method and system for providing time-critical services
JP 7604668 B2	室内環境を室内利用者の環境嗜好に調整するための方法及び装置
EP 4 137 822 B1	METHOD FOR INCREASING THE RELIABILITY OF AN INDUSTRIAL INPUT / OUTPUT ASSEMBLY AND INPUT / OUTPUT ASSEMBLY
EP 4 156 217 B1	PROTECTIVE SWITCHING DEVICE
CN 116033972 B	振动系统的谐振方法、转换器、激励单元及振动系统
CN 112154089 B	用于在轨道车辆中定位变压器的装置
AU 2024278644 B2	Brake apparatus with distance sensor for use with a twin axle of a track-guided vehicle
CN 113056927 B	具有嵌入式安全应用和单向通信的数据捕获装置
EP 3 909 106 B1	DÉTECTION D'ERREUR ET LOCALISATION D'ERREUR DANS UNE ZONE DE CHARGE D'UN RÉSEAU CC
US 12,549,339 B2	Encryption of program instructions in a numerical control device
EP 3 972 884 B1	RAIL INSTALLATION AND METHOD FOR OPERATING A RAIL INSTALLATION
CN 114080342 B	用于运行轨道车辆的方法
EP 3 616 381 B1	METHOD AND DEVICE FOR TRANSMITTING A MESSAGE IN A SAFETY-RELEVANT FACILITY
US 12,442,229 B2	Door gap lock
CN 115184789 B	自动转换开关测试装置和方法
US 11,828,622 B2	Sensor element and device for measuring process parameters in a sintering plant
EP 3 679 436 B1	ANALYSIS OF POWDER BED PROCESSES
CN 114417946 B	目标检测方法及装置
US 12,411,824 B2	Method of assessing input-output datasets using local complexity values and associated data structure
US 12,535,555 B2	Measurement arrangement
US 12,668,132 B2	Rocker for a current collector of a vehicle
EP 4 379 794 B1	PULSATING HEAT PIPE SUPPORT DEVICE, POWER MODULE, AND COMPUTER PROGRAM PRODUCT
SG 11202106011 B	LIGHTING CONTROL SYSTEM CONFIGURABLE BY CONTROL DEVICE
US 12,066,498 B2	Method for identifying at least one diagnosis variable, measuring device and measuring system
EP 4 069 550 B1	MEASURING DEVICE FOR ASCERTAINING THE POSITION OF AN OVERHEAD LINE
CN 114746815 B	用于创建设施或装置的数字孪生的方法
IN 513052 B	METHOD FOR CHANGING THE CONFIGURATION OF CONNECTED NETWORKS
US 12,559,145 B2	Device for supplying energy to a sensor arrangement in a rail vehicle
CN 112425035 B	坚固的材料层
CN 115184785 B	测试方法、测试系统以及电子设备
CN 115516457 B	按结构校正的填充单元插入

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,078,982 B2	Methods and systems for workpiece quality control
CN 112533814 B	用于轨道车辆的行驶机构
US 12,085,903 B2	Method, device, and system for configuring a coating machine
US 11,798,755 B2	Real time monitoring and parametric modifications for electronic circuit breakers through a remote device
EP 4 073 837 B1	ELECTRONIC MODULE, METHOD FOR PRODUCING AN ELECTRONIC MODULE, AND INDUSTRIAL PLANT
CN 114585896 B	对管道内流动气体进行检测的检测装置
CN 115712495 B	技术设施服务器的主机/主机场景本地存档的细粒度协调
EP 3 918 542 B1	DYNAMIC DEPLOYING A MOM MODULE ACROSS A PLURALITY OF LAYERS
US 12,540,840 B2	Electromagnetic flowmeter with a plurality of coils
EP 4 511 961 B1	METHOD FOR OPERATING A GRID-COUPLED INVERTER, INVERTER, COMPUTER PROGRAM AND COMPUTER READABLE MEDIUM
US 12,400,316 B2	Determining the level of wear of a tool
EP 3 665 536 B1	DETERMINATION OF THE CAUSES OF ANOMALY EVENTS
CN 116761959 B	用于将室内气候与房间用户的气候偏好进行比较的方法和装置
EP 4 047 435 B1	SYSTEM AND METHOD FOR ANOMALY MANAGEMENT IN FACILITY
EP 4 413 429 B1	METHOD AND SYSTEM FOR PROVISION OF CONTROL APPLICATIONS FOR AN INDUSTRIAL AUTOMATION SYSTEM
CN 111948934 B	引导操纵器运动的系统和改变或扩展应用任务的方法
CN 113452170 B	分拣设施、止动设备和传输单元
AU 2022321857 B2	METHOD FOR FLOW MEASUREMENT THAT IS SUBJECT TO INTERFERENCE, MAGNETO-INDUCTIVE FLOWMETER AND COMPUTER PROGRAM PRODUCT
CN 114359571 B	目标匹配的方法及装置、计算机可读介质
CN 114258514 B	基于面向方面编程的可编程逻辑控制器 (PLC) 模拟
JP 7612881 B2	技術システムを制御するための制御装置、及び、その制御装置を構成するための方法
CN 113508527 B	作为衰减元件的电子开关
US 11,876,876 B2	Communication conversion method, gateway device, network system and computer medium
CN 115180229 B	产品自动分片方法及装置、理片机、计算设备、存储介质
IN 593636 B	SIMULATION SYSTEM,METHOD FOR CARRYING OUT A SIMULATION, CONTROL SYSTEM AND COMPUTER PROGRAM PRODUCT
US 11,979,419 B2	Industrial process system threat detection
EP 4 268 963 B1	METHOD AND ASSEMBLY FOR THE INDUSTRIAL PRODUCTION OF A SUSPENSION FOR A BATTERY
US 12,282,420 B2	Programmatical errors from engineering programs in a technical installation
EP 4 385 175 B1	COMMUNICATION SYSTEM AND COMMUNICATION METHOD USING A STATUS MESSAGE
CN 113382395 B	设备配置
EP 3 690 867 B1	FINGERPRINTING OF SEMICONDUCTOR DIE ARRANGEMENTS
DE 10 2017 214 557 B4	Elektromechanisches Schutzschaltgerät
IN 565978 B	SYSTEM METHOD AND A COMPUTER PROGRAM PRODUCT FOR AN IMPROVED FAULT ANALYSIS IN AN ELECTRICAL POWER SYSTEM
IN 567208 B	NETWORK ADAPTER FOR UNIDIRECTIONAL DATA TRANSMISSION
US 11,921,499 B2	Multi-parameter dynamic sampling method and multi-parameter dynamic sampling device
US 12,686,426 B2	Crossing gate mechanism with integrated position detection and angle measurement
US 12,506,414 B2	Bi-directional power converter employable in DC fast charging
IN 580249 B	SENSOR UNIT AND METHOD FOR IDENTIFYING FAULT CURRENTS IN A POWER SUPPLY NETWORK
EP 4 217 871 B1	METHOD AND SYSTEMS FOR VALIDATION OF INDUSTRIAL MACHINE SYSTEMS
CN 117882050 B	用于生成与特定工程环境兼容的工程程序的方法和系统
CN 114730283 B	以锁步方式操作的监测处理器
CN 112507757 B	车辆行为检测方法、装置和计算机可读介质
CN 114364537 B	印刷装置、印刷机系统和用于印刷对象的方法
US 12,093,026 B2	Comprehensive fault analysis of control devices and industrial technical installations
EP 3 776 835 B1	CIRCUIT ARRANGEMENT FOR THREE POINT CONVERTER
US 12,348,604 B2	System and method for configuring multiple PTP ports of a network device
US 12,081,146 B2	Method for starting and stopping an asynchronous motor
US 11,879,929 B2	Method and device for automatically testing a switching member
US 12,489,609 B2	Method for arranging a shared cryptographic key and method for encrypted communication, computer program product and device
US 12,140,935 B2	Device and method for setting up and/or providing a working environment

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 116097266 B	气化炉模型的优化方法、装置和计算机可读存储介质
IN 526055 B	METHOD AND SYSTEM FOR IDENTIFICATION OF LANDING SITES FOR AERIAL VEHICLES
CN 115123346 B	用于监测轨道车辆的静止关闭的方法
US 11,853,049 B2	Integrity monitoring in automation systems
US 11,973,830 B2	System and method for streaming measurement data
CN 113994634 B	用于在两个或更多个网络之间的数据传输的方法和传输装置
US 11,916,903 B2	Method for setting up authorization verification for a first device
EP 4 008 137 B1	METHOD AND APPARATUS FOR FACILITATING TIME SYNCHRONIZATION OF COMMUNICATION IN AN INDUSTRIAL ENVIRONMENT
US 11,929,218 B2	Rocker arm of an electric switch, blocking device with such a rocker arm, and electric switch with such a rocker arm and such a blocking device
EP 4 035 970 B1	METHOD FOR ENCODED COMMUNICATION BETWEEN A TRACK-BOUND VEHICLE AND A TRACK-SIDE DEVICE, AND DEVICES FOR APPLYING THE METHOD
EP 4 092 645 B1	INCREASE IN THE SUCTION PERFORMANCE OF AN INTAKE SMOKE ALARM (ASD) TO SHORTEN THE TRANSPORT TIME FROM A DETECTED MINIMUM SIGNAL LEVEL VALUE WITHOUT OUTPUT OF AN INTERRUPTION MESSAGE
CN 112740535 B	对三相电机进行转速调节的方法、控制装置和三相电机
EP 4 016 208 B1	METHOD FOR CONTROLLING AN ACTUATOR OF A DEVICE WITH A COMPUTING UNIT
CN 112798896 B	开关柜故障诊断的方法与装置
US 12,681,463 B2	Information providing method and system
CN 115461959 B	用于制造电机的方法
CN 116657332 B	调整交叉铺网机的铺网均匀度的方法和装置
AT 527233 B1	Keillager
CN 112639781 B	用于实时工业控制系统安全事件监视和管理的知识图
EP 4 096 079 B1	DEVICE FOR TESTING THE FUNCTION OF CONDENSERS OF A FILTER DEVICE OF A VEHICLE
CN 114667537 B	利用标量值分析图像信息的方法和分析声学信息的方法
US 12,650,672 B2	Control system method for controlling an apparatus or installation
US 11,970,219 B2	Trim assembly for a vehicle
EP 4 217 932 B1	TRAINING DATA GENERATOR AND METHOD FOR GENERATING TRAINING DATA
US 11,860,611 B2	Method for identifying a limited operator control and monitoring of a technical plant, operator control and monitoring system and process control system
EP 3 435 184 B1	SYSTEM, METHOD AND CONTROL UNIT FOR CONTROLLING A TECHNICAL SYSTEM
CN 112335163 B	无源滤波器电路电容器功能确定方法、确定装置和电设备
CN 117397202 B	用于监测基于散列的数字签名的监测系统
EP 4 074 006 B1	REAL-TIME AND INDEPENDENT CYBER-ATTACK MONITORING AND AUTOMATIC CYBER-ATTACK RESPONSE SYSTEM
US 11,954,643 B2	System and method for generating a plant bill of process
CN 112740048 B	测量传感器
CN 114174936 B	兼容性检查的自学习例程
US 12,038,444 B2	Pseudo-electropherogram construction from peptide level mass spectrometry data
CN 116171488 B	具有可靠绝缘的接触系统
EP 4 249 334 B1	BRAKE ASSEMBLY, VEHICLE HAVING A BRAKE ASSEMBLY AND METHOD FOR OPERATING THE SAME
EP 3 748 296 B1	METHOD AND SCANNING SYSTEM FOR COMPUTING A USE CASE SPECIFIC SCAN ROUTE
EP 4 057 087 B1	A METHOD FOR PROVIDING A PREDICTED BINARY PROCESS SIGNAL
US 12,537,388 B2	Method for controlling an energy network, agent device, network control arrangement and system
IN 591308 B	A SYSTEM AND METHOD FOR MANAGING TIMESERIES DATA
EP 4 507 947 B1	METHOD AND DEVICE FOR ASCERTAINING THE GEOMETRY OF A WHEEL, AND RAIL VEHICLE
EP 4 270 236 B1	METHOD AND DEVICE FOR PROVIDING A RECOMMENDER SYSTEM
AU 2023405424 B2	GRIT SYSTEM FOR A RAIL VEHICLE
EP 3 772 713 B1	SYSTEM WITH OPTIMAL AVAILABILITY AND METHOD FOR OPERATING A SYSTEM WITH OPTIMAL AVAILABILITY
EP 4 189 860 B1	TESTING OF RADIO EQUIPMENT
EP 3 587 042 B1	METHOD, APPARATUS AND SYSTEM FOR DETERMINING A TRAJECTORY OF A ROBOT'S END EFFECTOR
US 12,034,875 B2	Establishing secure communication without local time information
IN 561087 B	SYSTEM, APPARATUS AND METHOD FOR ESTIMATING REMAINING USEFUL LIFE OF A BEARING
EP 3 905 298 B1	COMMUNICATION MODULE
CN 116018625 B	用于火警系统的自动检查的方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 164 934 B1	RAIL VEHICLE COMPRISING AN EXTENDABLE STEP PLATFORM
CN 114258543 B	用于计算机辅助设计 (CAD) 模型的可视化元素的交互数据的选择性加载
EP 4 342 767 B1	RAILWAY SIGNALLING DESIGN CHECKER
CN 115885228 B	对自动化设施的使用数据进行数字认证的系统和方法
EP 3 910 294 B1	DETERMINATION OF THE MIXING RATIO, IN PARTICULAR OF A WATER/GLYCOL MIX, BY MEANS OF ULTRASOUND AND A THERMAL FLOW MEASUREMENT BASED THEREON
CN 115705022 B	提高工业输入/输出组件安全性的方法和输入/输出组件
EP 4 524 661 B1	METHOD FOR MONITORING A COMMUNICATION CONNECTION
DE 10 2024 201 848 B4	Beschreiben eines Geräts mit großem Sprachmodell
US 12,580,385 B2	Methods and systems for controlling an energy exchange
EP 4 312 090 B1	METHOD FOR IDENTIFYING A PROCESS MODEL FOR MODEL-BASED PREDICTIVE MULTIVARIABLE CONTROL OF A PROCESS PLANT
US 12,548,339 B2	System for visually monitoring a workspace
EP 3 999 925 B1	METHOD AND DEVICE FOR DETERMINING A PRODUCT QUALITY
DE 10 2021 210 831 B4	Schutzschaltgerät und Verfahren
CN 114548640 B	确定MOM应用的模块要被部署在哪个技术层中
EP 3 921 606 B1	WEIGHING DEVICE AND METHOD FOR CHECKING SAID DEVICE
CN 116530224 B	冷却体装置和功率转换器装置
IN 504992 B	METHOD AND DEVICE FOR DETERMINING THE CAUSE OF A FAULT IN AN ELECTRICAL CIRCUIT
CN 111832572 B	用于分类模型的经计算机实现的分析的方法
IN 544076 B	ECOSYSTEM EXCHANGING INFORMATION ABOUT ESG DATA OF A PRODUCT RELATED ENTITY
CN 116902458 B	输送装置
CN 114760349 B	服务访问方法和装置、系统、设备、介质
EP 4 305 518 B1	COMPUTER-IMPLEMENTED METHOD FOR DETERMINING A GAUSSIAN INTEGER CONGRUENT TO A GIVEN GAUSSIAN INTEGER MODULO A GAUSSIAN INTEGER MODULUS, METHOD FOR DETERMINING A REDUCTION OF A GIVEN GAUSSIAN INTEGER MODULO A GAUSSIAN INTEGER MODULUS AND CRYPTOGRAPHIC METHOD AND ERROR-CORRECTION METHOD
CN 111078444 B	用于故障行为的安全分析的系统和方法
EP 4 174 691 B1	CONTROL SYSTEM FOR A TECHNICAL INSTALLATION AND METHOD FOR REMOVING ONE OR MORE CERTIFICATES
US 12,184,132 B2	Method for manufacturing a magnetic sheet and a stack of magnetic sheets and electric machine and electric vehicle
IN 511948 B	SWITCHGEAR WITH AN INTERLOCKING MECHANISM FOR CONTROLLING ACTUATION OF A SWITCH IN THE SWITCHGEAR
EP 4 134 919 B1	CONSTRUCTION OF ENVIRONMENT VIEWS FROM SELECTIVELY DETERMINED ENVIRONMENT IMAGES
US 11,973,418 B2	Inverter to be connected to or disconnected from a grid
AU 2022228605 B2	METHOD AND CONTROL DEVICE FOR CONTROLLING LOAD FLOWS BETWEEN A PLURALITY OF ENERGY SYSTEMS
US 12,166,392 B2	Matched contour winding of coils in slot between adjacent teeth of stator core and processing method therefor
US 12,314,158 B2	Testing IoT-applications based on a fleet of IoT-devices
CN 113614654 B	安全相关的诊断消息
CN 113852288 B	有源整流器电路
CN 115668742 B	用于启动和停止异步电机的方法
EP 4 500 579 B1	METHOD OF MANUFACTURING A SEMICONDUCTOR ASSEMBLY COMPRISING A SEMICONDUCTOR ELEMENT AND A SUBSTRATE AND CORRESPONDING SEMICONDUCTOR ASSEMBLY
US 11,809,786 B2	Method and device for generating a digital model of a building
US 12,461,959 B2	System and method for data management
EP 3 975 318 B1	VEHICLE WITH THE BATTERY UNIT
EP 4 240 623 B1	CONTROL DEVICE
US 12,021,968 B2	Method for data processing in a computing environment with distributed computers and railway application
IN 483547 B	SWITCHING INSTALLATION WITH IMPROVED VENTILATION APPARATUS
US 12,190,262 B2	Method and device for the computer-aided optimization of tool transporting operations for at least one tool magazine having a number of magazine locations
US 11,827,260 B2	Grade crossing control system
CN 111771170 B	用于感知系统的自动配置系统及其运行方法和相应的装置
EP 4 115 585 B1	DEVICE AND METHOD FOR INSERTING DEVICE DATA INTO A DISTRIBUTED DATABASE SYSTEM
CN 114451027 B	用于工业环境中的通信的简单的时间同步的方法和设备
CN 113911791 B	转塔放卷机构、其接料单元及其尾料控制方法
CN 112118982 B	用于对电动车辆的电能存储器充电的充电系统以及相关方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 584 707 B1	METHOD AND SYSTEM FOR ENVIRONMENT-DEPENDENT SAFETY-RELATED ANOMALY DETECTION FOR A CONTAINER INSTANCE
US 11,831,160 B2	Power load data prediction method and device, and storage medium
US 12,124,771 B2	Computer aided design of custom cellular lattice kernels according to material properties
CN 113169670 B	测量分流器
SG 11202403774 B	METHOD FOR LOADING A TRANSPORT MEANS WITH A LOADING CONTAINER, HANDLING DEVICE
JP 7425871 B2	集積回路チップにおいて観察された異常の原因識別
EP 4 229 489 B1	CO-SIMULATION, COMPUTER SYSTEM
US 11,977,833 B2	Computer-implemented method and apparatus for automatically annotating columns of a table with semantic types
CN 114786927 B	用于确定多对象构建作业中打印材料粉末量的方法和系统
EP 4 427 101 B1	METHOD AND SYSTEM FOR PROVIDING TIME-CRITICAL CONTROL APPLICATIONS
EP 4 611 493 B1	METHOD FOR MONITORING THE PRINTING READINESS OF A PRINTING MASK, COMPUTER PROGRAM AND COMPUTER SYSTEM
CN 118661153 B	管理app，特别是开发包括更新app的工作流的app、方法及系统
EP 4 377 986 B1	CIRCUIT BREAKER
EP 4 112 356 B1	DEVICE FOR SUPPLYING ENERGY TO A SENSOR DEVICE IN A RAIL VEHICLE
US 12,415,267 B2	Synthesizing machine learning-based controllers for underactuated robotic manipulators
CN 114340826 B	装配线的工艺参数的检测
CA 3067209 C	DISCOVERY AND IDENTIFICATION OF EQUIPMENT AND OPERATIONAL DATA IN A BUILDING AUTOMATION SYSTEM
CN 116018505 B	用于借助人工智能确定冷却体污染的方法
CN 114078833 B	具有至少两个在基底上接触的功率半导体布置的功率模块
AU 2021399108 B2	DOOR GAP LOCK
US 12,427,665 B2	Method and system for automatically determining a motion data sample of a given robot and its surrounding object set
EP 4 414 795 B1	METHOD AND SYSTEM FOR OPERATING A TECHNICAL DEVICE USING AN ARTIFICIAL INTELLIGENCE-BASED MODEL
EP 4 332 403 B1	ACTUATING FORCE COUPLING
EP 4 025 922 B1	UNIVERSAL COMPACTOR ARCHITECTURE FOR TESTING CIRCUITS
CN 112912846 B	管理在部分可重新配置的硬件系统上的软IP的许可证
CN 110969222 B	信息提供方法和系统
US 11,868,685 B2	Generating a digital twin, method, system, computer program product
EP 3 863 037 B1	A NEW ACCESSORY FOR CIRCUIT BREAKER STATUS PRE-ALARM AND MONITORING
US 12,142,133 B2	Fire safety device address and location verification
EP 3 570 437 B1	CIRCUIT ASSEMBLY FOR GENERATING A SUPPLY VOLTAGE WITH CONTROLLABLE MASS POTENTIAL LEVEL
EP 3 958 194 B1	METHOD AND DEVICE FOR ASSESSING STATE OF HEALTH OF TRANSFORMER, AND STORAGE MEDIUM
US 12,046,315 B2	Memory built-in self-test with automated reference trim feedback for memory sensing
EP 4 232 339 B1	PROCESS FOR THE MODULAR MANUFACTURING OF ROUGH BODYWORK OF A RAIL VEHICLE, AND ROUGH BODYWORK
CN 109522587 B	用于在工业自动化环境中自动生成交互式布线图的方法和系统
US 12,135,206 B2	Method for determining actual state values
US 12,008,144 B2	Method and apparatus for tamper-proof storage of information in respect of object-related measures
EP 4 450 359 B1	RECEIVING ARRANGEMENT FOR A CONTAINER FOR A RAIL VEHICLE
US 11,801,878 B2	Sensor unit for detecting the approach of a train and system with said sensor unit
CN 114906627 B	传送带控制方法、装置、电子设备和存储介质
EP 4 183 097 B1	METHOD AND SYSTEMS FOR GENERATING UNIQUELY IDENTIFIABLE SOFTWARE INSTALLATIONS
CN 114128071 B	用于保护布置在直流电网中的耗电器的过流保护设备
CN 112578744 B	在工业控制器上调度一或多个控制应用的方法及配置工具
EP 4 193 456 B1	ASSEMBLY AND METHOD FOR DETERMINING TEMPERATURES OF ELECTRONIC COMPONENTS
KR 102935460 B1	플럭스 도포를 모니터링하기 위한 방법, 컴퓨터 프로그램 및 컴퓨터 시스템
CN 113874863 B	基于几何模型评估生产过程中KPI的方法、系统、装置
AU 2023202494 B2	Method for computer-assisted operation of a memory unit and execution of application programs having memory checking for memory errors
CN 113056869 B	用于控制多相电机的方法及变流器
US 12,663,277 B2	Method and system for block scheduling for electric vehicle with intraday charging
EP 3 856 603 B1	MULTIPART RAIL VEHICLE COMPRISING STANDARDISED ENTRY AREAS
US 11,982,986 B2	Data synchronization system for device based engineering

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 068 330 B1	DEVICE FOR COMPENSATING FOR RESISTANCE TOLERANCES OF A FUSE FOR A CIRCUIT AND LINE DRIVER FOR A CONNECTION OF A COMMUNICATION DEVICE
IN 563407 B	TRANSMISSION DEVICE FOR TRANSMITTING DATA
CN 116848476 B	针对控制功能的零停机时间升级的基于PLC的支持
US 12,088,967 B2	Construction of environment views from selectively determined environment images
DE 10 2021 207 576 B4	Unterbrechungsfreie Spannungsversorgung für ein Nieder-, Mittel- oder Hochspannungsnetz
CN 115447123 B	用于吹膜机的级联控制方法及使用其方法的吹膜机
CN 111931839 B	开关设备在线监控的方法与装置
EP 4 118 499 B1	INSPECTION RATE ADAPTATION
CN 116443072 B	动态分相区数据处理方法、装置、电子设备以及存储介质
US 12,521,795 B2	Heat-aware toolpath reordering for 3D printing of physical parts
US 12,170,681 B2	Method and system for detecting data traffic in a communication network
EP 4 332 522 B1	METHOD FOR DETERMINING A LOAD ERROR CORRECTION FACTOR AND METHOD FOR CARRYING OUT A LOAD CORRECTION FOR A RAIL VEHICLE
US 12,049,244 B2	Controllable track conditioning unit
CN 113728281 B	将工具分配给工具库中的空间
EP 4 718 786 B1	METHOD FOR THE REDUNDANT TRANSMISSION OF DATA IN A COMMUNICATION NETWORK, COMMUNICATION SYSTEM AND CONFIGURATION DEVICE
CN 112997156 B	用于电子设计自动化操作的计算资源的动态分配
CN 115917550 B	电路设计的候选热点位置的基于机器学习的淘汰选择
US 11,815,374 B2	Flow meter for a fluid with a pulsating flow
US 12,589,497 B2	Monitoring system and method for operating the system
US 12,358,540 B2	Arrangement for driving a locomotive having various energy-provision systems
US 12,541,673 B2	Method and system for automated correction and/or completion of a database
US 11,938,976 B2	Arrangement for driving a locomotive having various energy-provision systems
US 12,196,608 B2	Light-out detection for wayside signals
EP 3 980 854 B1	A SYSTEM FOR GENERATION OF A HOLISTIC DIGITAL TWIN
US 12,461,720 B2	System and method for adapting a reconfigurable runtime system used in automation systems
EP 4 307 148 B1	ACCREDITATION OF A CLOUD BASED EXECUTION ENVIRONMENT FOR PROJECT PLANNING
CN 112997170 B	用于将用于自动化目的的数据模型变换成目标本体的方法
US 12,088,578 B2	Cryptographically protected provision of a digital certificate
CN 111046344 B	用于检查资源属性的装置和方法
CN 113924706 B	直流电网中的接地故障的定位
EP 3 667 851 B1	CREATION OF DYNAMIC MODELS OF NETWORK NODES IN A LOW AND / OR MEDIUM VOLTAGE DISTRIBUTION NETWORK BY USE OF A SELF LEARNING ALGORITHM
IN 495636 B	GAP-BRIDGING DEVICE FOR A RAIL VEHICLE
EP 4 268 070 B1	METHOD FOR CONFIGURATION OF CONTROL SOFTWARE IN A RAIL VEHICLE
EP 4 181 387 B1	HALF-STEP MOTOR DRIVER
AU 2022263458 B2	Method and apparatus for identifying properties of a vehicle
EP 4 272 042 B1	ANOMALY CAUSE ANALYSIS BASED ON SIMULATED SYMPTOMS
EP 3 912 071 B1	KEY MANAGEMENT IN AN INTEGRATED CIRCUIT
AU 2023313981 B2	DEVICE AND METHOD FOR DETECTING AND CONTROLLING AN ARM POSITION OF A RAILROAD CROSSING GATE MECHANISM
EP 3 795 451 B1	METHOD FOR LOCATING A VEHICLE ON A STATION PROVIDED FOR THE VEHICLE STOPPING
AU 2021339852 B2	SERVO DRIVE HAVING AN ELECTRIC MOTOR AND AN ELECTROMAGNET ARRANGED MOVABLY ON THE ROTOR OF THE ELECTRIC MOTOR TO APPLY A HOLDING TORQUE WITH CONTACT VIA A REMANENT MAGNETIC FIELD
EP 3 616 335 B1	COMMUNICATIONS NETWORK AND METHOD FOR USING THE COMMUNICATIONS NETWORK
EP 4 058 771 B1	METHOD FOR DETERMINING A REMAINING USEFUL LIFE OF A BEARING
CN 110249327 B	通过2.5维鞋模型进行鞋设计
CN 116325967 B	用于调节多个工业设备的传输的方法
CN 114911280 B	湿度控制方法和装置
CN 114096450 B	用于轨道运载工具的紧急制动装置
EP 3 667 576 B1	AUTONOMOUS FLEXIBLE PRODUCTION SYSTEM
KR 102702362 B1	배터리 저장 시스템들의 서비스 수명을 추정하기 위한 방법, 장치 및 컴퓨터 프로그램 제품
CN 113788303 B	储瓶台换道方法、装置、电子设备和存储介质

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 223 611 B1	FLUIDIC COUPLING DEVICE AND CHASSIS
EP 3 948 912 B1	MEDIUM VOLTAGE LOAD BREAK SWITCH
US 11,798,756 B2	Solid-state circuit breaker trips an air gap actuator and solid-state switching components at the same time or the solid-state switching components with a delay
US 12,346,342 B2	Exchanging data with a decentralized distributed database
EP 3 804 118 B1	OPTIMIZED OPERATION OF A MACHINE WITH MULTIPLE DRIVES
US 12,384,432 B2	End of train (EOT) remote track-condition monitoring
DE 10 2021 207 110 B4	Anordnung und Verfahren für eine automatische Konfiguration eines Magnetantriebs
CN 118020279 B	从容器上托管的应用程序捕获数据包的方法
US 12,425,421 B2	Systems and methods for analyzing and controlling network traffic
US 12,147,921 B2	System and method for providing short-term dispatching decisions for operating a number of resources involved in a number of production processes under consideration of long-term objectives
CN 112997302 B	冷却装置
US 12,678,966 B2	Adaptive region of interest (ROI) for vision guided robotic bin picking
EP 3 602 216 B1	PROCESS IMAGE WITHIN CONTROLLERS ENABLING VISIBILITY AND ACCESSIBILITY OF REAL WORLD OBJECTS
EP 4 449 064 B1	METHOD FOR DETERMINING THE FILL LEVEL OF A PIPE, EVALUATION UNIT, FLOW MEASUREMENT SYSTEM AND COMPUTER PROGRAM PRODUCT
US 11,868,693 B2	Verification performance profiling with selective data reduction
EP 4 089 391 B1	MEASUREMENT APPARATUS FOR MEASURING AIR FLOWING INSIDE PIPELINE
EP 4 237 307 B1	ASSEMBLY FOR TRANSMITTING LONGITUDINAL FORCES IN A RAIL VEHICLE
CN 116195157 B	用于预测能量服务提供的方法和装置以及软件程序产品
EP 4 268 026 B1	CONTROLLING A MANUFACTURING SCHEDULE BY A REINFORCEMENT LEARNING TRAINED AGENT
US 11,803,176 B2	Method and device for planning a specific process system
JP 7538338 B2	産業システムをシミュレーションするコンピューティングプラットフォームとそのシミュレーションを管理する方法
EP 4 347 347 B1	SENSOR ARRANGEMENT AND BOGIE
EP 4 143 876 B1	SEMICONDUCTOR MODULE WITH A RECESS
CN 113841156 B	基于图像识别的控制方法与装置
CN 114174008 B	通过机器人操纵对象的方法和操纵系统
EP 4 194 979 B1	SYSTEM, PROGRAM AND METHOD FOR MONITORING CONDITION OF AN ELECTROMECHANICAL SYSTEM
EP 4 476 643 B1	METHOD AND DEVICE FOR OPERATING AN AUTOMATION SYSTEM
EP 4 158 432 B1	METHOD OF PRODUCTION FOR TAMPER-PROOF MACHINE COMPONENTS
EP 4 377 980 B1	PROTECTIVE SWITCHING DEVICE AND METHOD
EP 4 239 592 B1	COMPUTER-IMPLEMENTED METHOD FOR DETECTING A NEW OBJECT IN AN INTERIOR OF A TRAIN
US 12,072,838 B2	Method for generating a coherent representation for at least two log files
US 12,113,324 B2	Housing of an electronic module and production thereof
CN 116803631 B	自主系统和由自主系统执行的方法
EP 3 895 313 B1	SWITCHING DEVICE FOR SEPARATING A CURRENT PATH
IN 524787 B	METHOD FOR MONITORING FUNCTIONS OF A BALISE AND READER SUITABLE THEREFOR
CN 116490944 B	用于制造具有至少一个留空部的材料层的方法
JP 7547493 B2	エアギャップスリーブを有する電気モータ
CN 115605862 B	训练用于3D模型数据库查询的可微分渲染器和神经网络
EP 4 238 119 B1	CIRCUIT BREAKER DEVICE AND METHOD
US 12,540,987 B2	Commissioning measuring devices
EP 4 483 157 B1	SYSTEM, APPARATUS AND METHOD FOR MISALIGNMENT-BASED REMAINING USEFUL LIFE ESTIMATION OF A BEARING
CN 113711140 B	具有用于将待嵌入的网络应用嵌入到周围网络应用中的系统的工业自动化系统和方法
US 12,066,989 B2	Method and apparatus for constructing knowledge graph
US 11,934,177 B2	Collision testing on the basis of high-quality geometry
CN 114896146 B	软件测试系统、方法、电子设备及存储介质
US 12,558,989 B2	Integrated multi-port electric vehicle (EV) charging system
CN 112189144 B	关于功能安全DC输出断线检测的负载供电中的故障检测
EP 3 835 170 B1	CREW WARNING SYSTEM WITH A PLURALITY OF END DEVICES FOR THE MEMBERS OF THE CREW AND METHOD FOR THE OPERATION OF SAME
JP 7390491 B2	ロボットジョイントのための鋸歯状安全制動装置、ロボットジョイント、およびロボット
EP 4 201 784 B1	ARRANGEMENT FOR DRIVING A LOCOMOTIVE HAVING DIFFERENT ENERGY PROVISION SYSTEMS

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 117021084 B	工件抓取方法、装置、系统、电子设备和存储介质
AT 528290 B1	Anlenkstange
CN 112970180 B	具有缩短的预充电时间的变频器
EP 4 155 904 B1	GRAPHICAL PROGRAMMING METHOD, PROCESSOR, AND TERMINAL
CN 114375428 B	PLC通信的抽象
US 12,042,942 B2	Robot hand-eye calibration method and apparatus, computing device, medium and product
AU 2021367795 B2	System and method for auto-tagging BMS points
CN 116157799 B	动态CDC验证方法
US 12,423,489 B2	Modifying a finite element mesh
CN 115051614 B	电机输出扭矩的控制方法、装置及变频器
US 12,164,474 B2	Method for configuring priority level, cloud platform, system, computing device, and medium
EP 4 154 692 B1	METHOD AND DEVICE FOR POPULATING CIRCUIT BOARDS BY MEANS OF FIXEDLY ASSIGNED COMPONENTS ON AT LEAST TWO ASSEMBLY LINES
EP 4 141 594 B1	DETAILED COMPARISON OF LOCAL ARCHIVES IN MASTER/MASTER SCENARIOS OF SERVERS OF A TECHNICAL FACILITY
DE 10 2020 204 338 B4	Auslösevorrichtung mit intelligenter Regelung zum Betätigen einer Schalteinrichtung und Verfahren zum Betreiben einer solchen Auslösevorrichtung
CN 113728319 B	用于监测硬件-应用的方法和可配置硬件模块
US 12,561,649 B2	Method, device and storage medium for constructing requirement behavior tree
CN 117138668 B	注料时间的控制方法以及控制系统
EP 3 915 128 B1	VACUUM SWITCHING DEVICE FOR MEDIUM- AND HIGH-VOLTAGE APPLICATIONS
US 12,085,594 B2	Method and circuit arrangement for ascertaining a type and value of an input voltage
US 12,275,443 B2	Method and system for data management in a means of transport
US 11,899,556 B2	Computer-implemented method for generating a component fault and deficiency tree of a multi-component system comprising a plurality of components
CN 112241533 B	为工业化边界设备提供应用容器的安全信息的方法和系统
AT 527539 B1	Extraktionswerkzeug, Extraktionswerkzeugsystem und Extraktionsverfahren
CN 114815745 B	工业监控设备的灾备方法、装置及工业监控系统
US 12,373,179 B2	System and method for decomposing monolith applications into software services
US 11,789,702 B2	Automatic derivation of software engineering artifact attributes
EP 3 753 798 B1	HOLDING DEVICE FOR AN INTERIOR OF A VEHICLE
US 11,770,035 B2	Laminated core for an electric machine
EP 4 113 910 B1	DEVICE FOR THE GALVANIC SEPARATION OF AT LEAST ONE DEVICE CONNECTABLE TO A 2-WIRE ETHERNET BUS SYSTEM, AND SWITCH FOR CONNECTING FIELD DEVICES
US 12,197,819 B2	Probabilistic design for metamaterials represented as program code
US 11,923,976 B2	Method for transmitting analysis-relevant data, transmitter and system
EP 4 204 823 B1	FIELD SENSOR COMBINATION FOR USE WITH MEDIUM AND HIGH VOLTAGES
US 12,502,765 B1	Flexible apparatus
EP 3 614 030 B1	CONDUIT ELEMENT WITH INTEGRATED HOLDER FOR FIXING MEANS
US 12,450,118 B2	Automatically detecting and correcting memory errors in a secure multi-channel computer
IN 564441 B	METHOD TO TRAIN A NEURAL NETWORK TO DETECT A TOOL STATUS FROM IMAGES, METHOD OF MACHINING AND/OR MANUFACTURING, AND INSTALLATION
CN 115674183 B	一种机械臂的控制方法、装置及控制系统
US 12,372,949 B2	Method and arrangement for commissioning an updated application for an industrial automation arrangement
US 12,497,038 B2	Assistance system for a road vehicle
US 11,999,391 B2	End-of-train device with audio support
CN 114631058 B	用于分辨率增强技术操作的任务的高效调度
IN 522744 B	DEVICE AND METHOD FOR DETECTING A WHEEL MOVING ALONG A RAIL
CN 113498568 B	负载与直流电网的连接
US 12,158,936 B2	Control system for a technical installation and method for removing one or more certificates
CN 116381267 B	传感器系统和利用其测量旋转轴的旋转参数的方法
US 12,550,282 B2	Modularly assembled automation system
CN 113168488 B	用于3D打印的内部通道网络检测
EP 3 652 104 B1	CONTROL EQUIPMENT FOR A HOISTING GEAR AND METHOD FOR OPERATING THE SAME
CN 115916475 B	机器人的工具中心点的校准方法、装置和系统

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,783,134 B2	Gap in care determination using a generic repository for healthcare
EP 4 121 791 B1	CLOCK DOMAIN TRANSLATION FOR NON-SYNCHRONIZED SENSORS
CN 113632020 B	用于运行工具机的方法以及工具机
AU 2021298025 B2	Method for power prediction of an energy system
EP 4 165 500 B1	A METHOD OF PROGRAMMING A SOFTWARE MODULE ASSOCIATED WITH A FIRMWARE UNIT OF A DEVICE
EP 4 641 431 B1	METHOD FOR ESTIMATING THE OUTPUT FLOWS OF SHREDDED PARTICLES OF A PRODUCT AFTER A SIMULATED SHREDDING PROCESS
US 12,663,763 B2	Method for optimizing an operation of a dynamoelectric machine
US 12,452,240 B2	Authenticating a communication partner on a device
CN 113966542 B	中压负荷隔离开关
CN 117795934 B	借助流控制环境提供时间关键的服务的方法和系统
DE 10 2022 206 624 B4	Fahrgastzählsystem
EP 4 496 291 B1	COMMUNICATION SYSTEM AND INDUSTRIAL AUTOMATION DEVICE FOR PROCESSING A WEB REQUEST FROM A CLIENT
EP 4 209 893 B1	METHOD AND SYSTEM FOR GENERATING AN AUTOMATION ENGINEERING PROJECT IN A TECHNICAL INSTALLATION USING MULTIDISCIPLINARY APPROACH
CN 112292239 B	用于计算机辅助地确定用于适宜操作技术系统的调节参数的方法和设备
EP 3 703 971 B1	OVERHEAD LINE ARRANGEMENT AND METHOD FOR MOUNTING AN OVERHEAD LINE ARRANGEMENT
EP 3 739 408 B1	METHOD FOR CHANGING CONFIGURATION IN A CYBER-PHYSICAL SYSTEM
KR 102580821 B1	자동화 디바이스용 확장 디바이스
EP 4 371 189 B1	CLAMPING MEMBER AND CONNECTING TERMINAL FOR AN ELECTRICAL CONDUCTOR
CN 119404474 B	在通信系统内安全传输时间关键数据的方法、通信系统和用于终端设备的适配器
CN 116034369 B	利用合规性验证对设计项目数据进行自动功能集群
EP 3 666 045 B1	MULTI-CHANNEL DIMMER
US 12,424,842 B2	Overload protection system includes a load management system having a monitoring relay with a “threshold hysteresis” built-in
US 12,522,263 B2	Controlling data transmission between a rail-bound vehicle and a land-based device by means of the land-based device
EP 4 286 243 B1	VALIDATION OF A SENSOR UNIT OF A RAIL VEHICLE FOR OBJECT LOCALIZATION
EP 4 420 951 B1	EXHAUST AIR SYSTEM, AIR CONDITIONING SYSTEM, AND TRACK-GUIDED VEHICLE
US 12,021,327 B2	Signal outlet assembly with shielding wire grounded to sidewall of the housing
EP 3 927 593 B1	METHOD FOR DETECTING SYSTEMATIC DEVIATIONS DURING DETERMINATION OF A MOVEMENT VARIABLE OF A GROUND-BASED, MORE PARTICULARLY RAIL-BASED, VEHICLE, AND CORRESPONDING APPARATUS AND VEHICLE
EP 4 103 409 B1	NOISE REDUCTION DEVICE FOR VEHICLE WHEEL
JP 7387908 B2	多様なロボットタスクの同時シミュレーションを容易にするための方法およびシステム
DE 10 2022 200 884 B4	Verfahren und Einrichtung zum Schätzen der Kapazität eines Energiespeichers
AU 2021244972 B2	Method for data transfer and communication system
EP 3 900 857 B1	DETERMINATION OF A RADIATION INTENSITY AND / OR A WAVELENGTH OF A PROCESS LIGHT
US 12,184,748 B2	Data transmission with communication broker
EP 4 073 801 B1	MEMORY BUILT-IN SELF-TEST WITH AUTOMATED REFERENCE TRIM FEEDBACK FOR MEMORY SENSING
US 12,438,706 B2	Method and system for onboarding an IoT device
CN 114614448 B	直流开关
EP 3 634 803 B1	POWER SUPPLY FOR A RAIL VEHICLE
EP 4 334 146 B1	AIR-CONDITIONING ARRANGEMENT FOR AN INTERIOR OF A VEHICLE
EP 4 319 102 B1	COMMUNICATION OF A REMOTE CONTROL TERMINAL BASED ON A MODULE TYPE PACKAGE
US 12,581,272 B2	Real-time location system and method using sensor-to-sensor data collection
US 12,488,114 B2	Analysis of a container instance of an operating system
EP 3 956 192 B1	DEVICE FOR A RAIL VEHICLE, AND RAIL VEHICLE
IN 485074 B	METHOD FOR ENGINEERING AND SIMULATING AN AUTOMATION SYSTEM BY MEANS OF DIGITAL TWINS
IN 538237 B	MOBILE TAG SENSING AND LOCATION DETERMINATION
US 12,017,541 B2	Vehicle and method for operating same
US 12,280,677 B2	Current collector for a rail vehicle
EP 4 111 271 B1	CONTROL SYSTEM OF A TECHNICAL ASSEMBLY
US 12,386,862 B2	Method and analysis system for technical devices
EP 4 388 374 B1	SYNCHRONISING DETECTION VALUES SUPPLIED IN A RESPECTIVE DETECTION CYCLE FOR A SAFETY FUNCTION
CN 112602025 B	工业控制器的数字孪生的自动设置

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 117716683 B	用于提供服务的方法、计算机程序产品以及系统
AT 527594 B1	Antrieb und Fahrwerk für ein Schienenfahrzeug
DE 10 2020 211 735 B4	Verfahren zum Betrieb eines Schienenfahrzeugs sowie Schienenfahrzeug
US 12,530,522 B2	Method and system for generating an automation engineering project in a technical installation using multidisciplinary approach
EP 3 756 205 B1	ADJUSTING DEVICE AND METHOD FOR ADJUSTING SWITCHING DEVICE MECHANISMS
EP 4 168 879 B1	METHOD FOR REMOTE ASSISTANCE AND DEVICE
EP 4 058 290 B1	METHOD AND APPARATUS FOR DESIGNING AND MANUFACTURING A COMPONENT IN A COMPUTER-AIDED DESIGN AND MANUFACTURING ENVIRONMENT
US 12,040,170 B2	Methods and apparatuses for deconvolution of mass spectrometry data
EP 4 307 513 B1	METHOD AND CONTROL DEVICE FOR CONTROLLING THE EXCHANGE OF ENERGY BETWEEN SEVERAL ENERGY SYSTEMS VIA AN ENERGY NETWORK
US 12,509,309 B2	Tapering of a conveyor flow of piece goods
CN 113942781 B	确定输送系统选型数据的方法和设备以及计算机可读存储介质
CN 112487579 B	提升机构中运行组件的剩余寿命的预测方法及装置
CN 112771763 B	用于交通工具的电机的转子管
US 12,406,065 B2	Method for securely starting device software, in particular an operating system, of an electronic device
EP 4 476 117 B1	ARRANGEMENT FOR TRAIN PROTECTION
CN 110383274 B	识别设备的方法、装置、系统、存储介质、处理器和终端
CN 115076714 B	用于调节燃烧设备的方法和计算机程序以及燃烧设备
EP 3 872 502 B1	METHOD AND DEVICE FOR DETECTION OF SUB-SYNCHRONOUS OSCILLATIONS IN A POWER SYSTEM
EP 4 222 764 B1	METHOD FOR PRODUCING A METALLIC LAYER WITH AT LEAST ONE RECESS
EP 4 004 659 B1	INTEROPERABILITY OF PLC COMMUNICATION
CN 113376515 B	确定断路器的关合时间的方法及装置、计算机可读介质
DE 10 2020 200 984 B4	Verfahren zur elektrischen Energieversorgung von Kraftfahrzeugen, Kraftfahrzeug und Versorgungssystem
US 12,407,527 B2	Host, method and system for the securely executing control applications
DE 10 2022 209 423 B3	Fahrwerkshöhenregelung mittels Fahrgasteinstiegssensor
US 12,252,154 B2	Automated system including reachability analysis
EP 4 167 075 B1	PROGRAMMING MARKING METHOD, PROCESSOR, TERMINAL, AND COMPUTER PROGRAM PRODUCT
DE 10 2019 214 821 B4	Leistungsschalter und mobiles Gerät
US 12,462,991 B2	Erosion resistant composite metal coating for plates of an arc chute assembly for a circuit breaker
EP 4 286 970 B1	METHOD AND SYSTEM FOR DETECTING SENSOR ANOMALIES
EP 4 050 517 B1	ARRANGEMENT FOR DETERMINING A CIRCUIT BOARD IDENTIFIER
EP 4 523 942 B1	ELECTRICAL SUPPLY SYSTEM FOR AN ON-BOARD ELECTRICAL SYSTEM OF A RAIL VEHICLE
US 12,680,711 B2	Method and assembly for comparing a room temperature with air-conditioning preferences of room users
CN 112513760 B	用于预测机器的剩余使用寿命的装置和方法
US 12,517,012 B2	Method for providing a physically explainable fault information of a bearing by a fault detection model
US 12,051,061 B2	Method for operating a distributed database system, distributed database system, and industrial automation system
US 12,665,688 B2	Method of generating simulated multipath fading channel data
US 12,168,467 B2	Energy optimisation during operation of a rail vehicle fleet
CN 116094967 B	数据通信方法、通信设备及计算机可读存储介质
EP 4 063 231 B1	SAFETY MONITORING FOR A TRACK-GUIDED VEHICLE
US 12,429,843 B2	Method and system for providing engineering of an industrial device in a cloud computing environment
JP 7439289 B2	最適化パラメータセットを用いた技術システムの製造または制御
EP 4 000 163 B1	ROTOR LAMINATION SHEET, METHOD FOR PRODUCING SAME AND ELECTRICAL MACHINE
US 12,362,932 B2	Method for registering a device with a computing facility, communication system and energy supply network
EP 3 727 990 B1	SYSTEM AND METHOD FOR MONITORING A RAILROAD GRADE CROSSING
AU 2021329231 B2	Systems and methods to assess and repair data using data quality indicators
IN 594909 B	METHOD AND SYSTEMS FOR VIBRATION-BASED STATUS MONITORING OF ELECTRIC ROTARY MACHINES
US 11,962,952 B2	Computer implemented method and system for retrieval of multi spectral BRDF parameters
US 12,045,027 B2	Method and control system for controlling and/or monitoring devices
CN 114944296 B	用于张紧蓄能器的设备和张紧蓄能器的方法
EP 3 758 214 B2	MOTOR STARTER AND METHOD FOR STARTING AN ELECTRIC MOTOR

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 112534450 B	用于提供基于情境的人工制品访问的方法
CN 116113949 B	空间数据的限界方法
US 12,361,730 B2	Method and arrangement for the digital capture of spaces in a building
US 11,913,826 B2	Method and apparatus for estimating electromagnetic forces active in an electric machine
CN 116733339 B	安全系统、隔离门和安全门
GB 2623954 B	Railway interlocking system and method
EP 4 146 496 B1	CHARGING OF ENERGY STORAGE DEVICES OF A VEHICLE AT WEAK POWER SUPPLY NETWORKS
CN 116057694 B	具有至少有一个功率单元的功率模块
CN 115049094 B	用于提供预测的二进制过程信号的方法
US 11,772,693 B2	Device for determining at least one measurement value related to a location and/or at least one movement variable of a track-bound vehicle, and method for operating such a device
EP 4 314 969 B1	CONTROLLING A PRODUCTION SYSTEM
AT 528204 B1	Fahrwerksrahmen, Fahrwerk für ein Schienenfahrzeug und Schienenfahrzeug
EP 4 513 290 B1	METHOD AND SYSTEM FOR MANAGING NAVIGATION OF AGV IN DYNAMIC ENVIRONMENT
US 12,321,727 B2	Data interaction method, apparatus and system for AI inference device and automation controller
CN 114963230 B	用于调节燃烧器设备的方法
EP 4 160 415 B1	SYSTEM AND METHOD FOR ENABLING CLIENT-SERVER COMMUNICATION USING OPC UA PROTOCOL
EP 4 108 539 B1	METHOD FOR PRODUCING A RAIL VEHICLE
EP 4 338 077 B1	METHOD, APPARATUS AND SYSTEM FOR VULNERABILITY DETECTION
CN 112543986 B	开关设备和方法
US 12,037,034 B2	Method and system for managing guided vehicle traffic within a railway network
US 12,137,427 B2	Method and apparatus for simple time synchronization of a communication in industrial settings
IN 459961 B	METHOD FOR STORING KEY DATA IN AN ELECTRONIC COMPONENT
EP 4 545 854 B1	CONTROL OF A COMBUSTION APPARATUS
IN 510845 B	SPRINKLER NOZZLE
EP 4 511 763 B1	PATH-BASED LAYER STACK CONNECTIVITY CHECK FOR PLASMA INDUCED DAMAGE AVOIDANCE
US 11,831,140 B2	System, circuit breaker, display unit and display holder
CN 116097265 B	基于梁的物理结构的基于机器学习的设计
US 12,482,090 B2	Wafer image defect detection and characterization for manufacturing process calibration
US 12,311,976 B2	Method of detecting an interference source in an industrial facility
EP 4 126 634 B1	VEHICLE CONTROL METHOD AND VEHICLE CONTROL SYSTEM
CN 110083364 B	涉及数据库的系统中模式变更的部署方法
EP 3 812 239 B1	COMPUTER-ASSISTED PLATFORM FOR REPRESENTING A RAIL INFRASTRUCTURE AND METHOD FOR OPERATING THE SAME
US 12,157,235 B2	Method for dynamic multi-dimensional spatio-temporal human machine interaction and feedback
AU 2021270688 B2	Device and method for controlling energy flows between components of an energy system
EP 4 356 074 B1	CAPACITIVE READING DEVICE FOR A POINTER INSTRUMENT
EP 4 037 126 B1	SYSTEM FOR THE CONTROLLED RAPID START AND OPERATION OF A REDUNDANTLY DESIGNED POWER BUS FOR FAIL-SAFE SUPPLY OF AN ELECTRICAL CONSUMER
US 11,809,848 B2	Method and system for protocol processing
CN 113906524 B	浇注树脂、由其制成的成型材料、其用途和电绝缘
US 12,494,718 B2	Bi-directional power converter
US 12,384,436 B2	Device and method for detecting an obstruction of a railroad crossing gate
EP 4 423 981 B1	METHOD FOR THE SECURE PROVISION OF A SERVICE THROUGH A CENTRAL PROVISION ENTITY AND DEVICE
AT 525404 B1	Elektrische Kontaktierungsvorrichtung für einen Stromabnehmer eines Fahrzeugs, Stromabnehmer und Fahrzeug
EP 4 154 074 B1	METHOD FOR THE AUTOMATED CREATION OF A SKILL INTERFACE, COMPUTER PROGRAMME PRODUCT, AND DEVICE
AT 527404 B1	Rückschlagklappe
EP 4 434 079 B1	HYBRID HEAT SINK
EP 4 555 461 B1	SYSTEMS AND METHODS FOR MONITORING ENERGY EFFICIENCY OF THE DRIVE SYSTEMS
AT 527601 B1	Einrichtung zum Lösen von Bremsen eines Schienenfahrzeugs
US 11,899,441 B2	Remaining service life prediction for switches
DE 10 2024 202 771 B4	Spurgeführtes Fahrzeug
US 12,254,389 B2	Controller for controlling a technical system, and method for configuring the controller
US 12,675,096 B2	Field device and functional unit for the field device

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
AT 527202 B1	Verfahren und Vorrichtung zur Entgleisungsdetektion für Schienenfahrzeuge und Schienenfahrzeug
EP 4 397 908 B1	FUEL QUANTITY CONTROL AND/OR AIR QUANTITY CONTROL
CN 110222101 B	用于工业过程自动化的组件和用于规划和运行组件的方法
JP 7492955 B2	実際の状態値を決定するための方法
EP 3 974 280 B1	BOGIE FOR A RAIL VEHICLE
AU 2023325275 B2	CONNECTING DEVICE, SWITCHGEAR ASSEMBLY HAVING A CONNECTING DEVICE AND METHOD FOR AUTOMATICALLY CONNECTING AND DISCONNECTING THE CONNECTING DEVICE
IN 592600 B	A CONTACT FOR A VACUUM INTERRUPTER, AND A PRODUCTION METHOD FOR SUCH A CONTACT
CN 115398747 B	用于管理通信的设备和方法
KR 102970893 B1	배터리 저장 디바이스의 전극층을 분석하기 위한 방법, 배터리 저장 디바이스를 생산하기 위한 방법 및 생산 유닛
US 12,222,705 B2	System and method for facilitating engineering of an industrial system
EP 4 164 103 B1	CIRCUIT ASSEMBLY FOR A RESONANCE CONVERTER
CN 113758556 B	测量固有频率的方法、固有频率检测装置及大型机械系统
EP 3 857 207 B1	SCATTERED LIGHT SMOKE DETECTOR HAVING A TWO-COLOR LED, A PHOTOSENSOR, AND A WAVELENGTH-SELECTIVE POLARIZER CONNECTED UPSTREAM OF THE PHOTOSENSOR OR CONNECTED DOWNSTREAM OF THE TWO-COLOR LED, AND SUITABLE USE OF SUCH A POLARIZER
US 11,863,544 B2	Authenticating a node in a communication network of an automation installation
IN 505332 B	PROTECTING INTEGRITY OF LOG DATA
CN 114174007 B	自主式机器人工装系统、控制系统、控制方法及存储介质
EP 3 833 509 B1	USER-DEFINED VIBRATION AVOIDANCE
US 11,999,261 B2	Method and system for monitoring a battery state utilizing a battery twin
EP 4 200 727 B1	METHOD AND DEVICE FOR SECURING ACCESS TO CODED VARIABLES IN A COMPUTER PROGRAM
US 11,880,353 B2	Method and system for handling engineering data in a multiengineering system environment
US 12,117,790 B2	Method and a system for synchronizing a first and a second simulation system
EP 4 378 140 B1	METHOD OF CAPTURING PACKETS FROM APPLICATIONS HOSTED ON CONTAINERS
KR 102820531 B1	잔류 자기장을 통한 접촉으로 유지 토크를 인가하기 위해 전기 모터 및 전기 모터의 회전자에 이동 가능하게 배열된 전자석을 갖는 서보 드라이브
EP 4 416 473 B1	METHOD FOR OPERATING SWITCHGEAR, AND SWITCHGEAR
CN 114460866 B	主回路的信号控制方法、装置和计算机可读介质
EP 4 147 258 B1	GAS EXHAUST MODULE FOR AN ELECTRICAL SWITCH, DEVICE CONSISTING OF TWO SUCH GAS EXHAUST MODULES AND SWITCHGEAR COMPRISING SUCH A DEVICE
US 12,646,326 B2	Occupancy determination method and system
DE 10 2023 201 458 B4	Verfahren zur Integration einer Anlagenkomponente in ein Kommunikationsnetzwerk einer technischen Anlage
KR 102831929 B1	산업 플랜트의 내부 데이터 프로세싱 시스템으로부터 외부 데이터 프로세싱 시스템으로 데이터를 제공하기 위한 방법들 및 시스템들
EP 4 234 344 B1	HOLDING DEVICE FOR A RAIL VEHICLE BRAKE AND CHASSIS FOR A RAIL VEHICLE
CN 113940031 B	在没有本地时间信息的情况下建立安全通信
US 12,549,378 B2	Monitoring system for monitoring hash-based digital signatures
CN 112783111 B	用于技术设施的具有趋势曲线图的控制系统
EP 4 049 476 B1	A DEVICE FOR TESTING A BASE STATION
US 12,548,719 B2	Circuit breaker with integrated safety lock-off mechanism
US 11,858,540 B2	Arrangement for driving a locomotive having various energy-provision systems
EP 4 091 971 B1	DEVICE FOR STABILIZING TELESCOPIC SHEARS WITH MULTIPLE TRACTION MEANS
BR 112021018999 B1	MÉTODO E SISTEMA PARA INCORPORAR UMA APLICAÇÃO WEB, E, SISTEMA DE AUTOMAÇÃO INDUSTRIAL
US 12,141,959 B2	Streamlining an automatic visual inspection process
EP 4 736 279 B1	SENSING DEVICE FOR TULIP CONTACT AND CIRCUIT BREAKER TROLLEY
EP 4 370 980 B1	EXPLICIT RULE-BASED CONTROL OF COMPLEX DYNAMICAL SYSTEMS
EP 4 172 702 B1	SYSTEM AND METHOD FOR INSTANTANEOUS PERFORMANCE MANAGEMENT OF A MACHINE TOOL
EP 4 013 655 B1	CHASSIS FOR A RAIL VEHICLE
US 12,371,080 B2	Train positioning method and apparatus, system, and computer-readable medium
EP 4 275 098 B1	SYSTEM AND METHOD FOR PROVIDING SHORT-TERM DISPATCHING DECISIONS FOR OPERATING A NUMBER OF RESOURCES INVOLVED IN A NUMBER OF PRODUCTION PROCESSES UNDER CONSIDERATION OF LONG-TERM OBJECTIVES
US 12,367,645 B2	Mesh generation
CN 116366689 B	分布式工业私有云系统
EP 3 997 530 B1	AUTOMATION ENGINEERING LEARNING FRAMEWORK FOR COGNITIVE ENGINEERING

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 112805711 B	用于高网格质量和各向同性的多区四边形网格生成器
US 12,438,744 B2	Extending BACnet systems to scale up to large topologies
CN 115684956 B	用于电池存储器寿命估计的方法、设备和计算机程序产品
EP 4 328 612 B1	METHOD FOR OPERATING A RADIO POSITIONING SYSTEM, RADIO POSITIONING SYSTEM AND TRANSPONDER
EP 4 053 569 B1	METHOD AND SYSTEM FOR EVALUATING AN INPUT VOLTAGE OF A POWER SUPPLY
EP 4 490 714 B1	APPARATUS FOR DETECTING A FIRE IN A VEHICLE
CA 3162157 C	BATTERY RECEPTACLE FOR A RAIL VEHICLE
US 12,346,120 B2	Detecting empty workspaces for robotic material handling
US 12,485,937 B2	Crossing gate mechanism with integrated cover or door detection scheme
CN 114467065 B	能由机器制造者参数化的数控装置
EP 4 069 569 B1	ASSEMBLY FOR INCREASING THE LOAD-BEARING CAPACITY OF A STRUCTURAL COMPONENT OF A RAIL VEHICLE
EP 4 107 046 B1	UNDERFRAME FOR A RAIL VEHICLE CAR BODY
EP 4 014 448 B1	SCHEDULING TRANSMISSIONS THROUGH A TELECOMMUNICATION NETWORK
EP 3 776 306 B1	ANALYSIS DEVICE, METHOD AND SYSTEM FOR OPERATIONAL TECHNOLOGY SYSTEM AND STORAGE MEDIUM
EP 4 251 929 B1	METHOD AND SYSTEM FOR PREVENTIVE MAINTENANCE OF HVAC UNITS
AU 2025200269 B2	Method for switch diagnosis for a railroad switch, simulation model and computing facility
US 12,377,891 B2	Communications between end of train devices and head of train devices on multiple trains
AU 2021333244 B2	Compressed-air supply arrangement for a train assembly
US 11,868,118 B2	Method for configuring an industrial automation component, industrial automation component, computer program and computer readable medium
EP 3 955 012 B1	METHOD AND DEVICE FOR DETERMINING THE LOCATION OF A FAULT ON A LINE OF AN ELECTRICAL ENERGY SUPPLY NETWORK
US 11,938,627 B2	Robot joint and robot
US 11,928,203 B2	Method and test environment for providing an application for a computer controlled component
US 11,973,777 B2	Knowledge graph for real time industrial control system security event monitoring and management
CN 111193215 B	开关柜的活门驱动机构、活门机构和手车联动机构
US 12,043,294 B2	Gap bridging system
CN 116691769 B	列车运行数据的处理方法、可读存储介质及列车
EP 4 222 565 B1	METHOD AND SYSTEMS FOR SIMULATING DRIVE DEVICES
US 12,541,631 B2	Free-form layout feature retargeting
IN 591868 B	MONITORING DEVICE AND METHOD FOR DETECTING ANOMALIES
CA 3142134 C	SYSTEM AND METHOD TO IMPROVE EMERGENCY RESPONSE TIME
DE 10 2021 201 810 B4	Niederspannungsleistungsschalter und Leistungsmessanordnung
US 11,946,778 B2	Retaining device for a rotary encoder
CN 117719893 B	装载系统的操作方法和控制装载系统的自动化系统
EP 3 752 408 B1	METHOD FOR CONTROLLING TWO ELECTRIC MOTORS
DE 10 2023 205 045 B4	Automatisiertes Ausrichten von Sensoren
US 12,580,139 B2	Connector for a circuit breaker and a downstream contactor, feeder with such a connector and arrangement with such a feeder
US 11,938,977 B2	Securing element and loss-prevention system
EP 4 051 551 B1	VEHICLE WITH AIR OUTLET OPENING
EP 3 945 703 B1	METHOD, NETWORK, COMPUTER PROGRAMM PRODUCT AND APPARATUS FOR REMOTELY UPDATING A TARGET DEVICE IN A NETWORK, IN PARTICULAR IN A A RAIL AUTOMATION SYSTEM
DE 10 2024 202 713 B3	Verfahren zur Inbetriebnahme einer insbesondere kapazitiven Ablesevorrichtung, Computerprogramm sowie computerlesbares Medium
EP 4 336 721 B1	METHOD FOR DETERMINING SYNCHRONOUS RECTIFICATION ON-TIME OF CLL CONVERTER
EP 3 362 921 B1	SYSTEM AND METHOD FOR MODELING OF PARTS WITH LATTICE STRUCTURES
US 12,386,846 B2	Method and system for integrating data from different data sources into a knowledge graph storage unit
CN 111474847 B	用于技术设施的控制系统的调节优化
EP 4 377 988 B1	CIRCUIT BREAKER
US 12,346,465 B2	Computer-implemented method for assisting a user in debugging roles in a software system
US 12,681,825 B2	Container runtime environment with distributed monitoring tasks and minimum privileges
EP 3 961 384 B1	AUTOMATIC DERIVATION OF SOFTWARE ENGINEERING ARTIFACT ATTRIBUTES FROM PRODUCT OR SERVICE DEVELOPMENT CONCEPTS

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 955 717 B1	MULTI-LEVEL POWER CONVERTER WITH OPTIMIZED TOPOLOGY
EP 3 935 541 B1	VALIDATION OF MEASUREMENT DATA SETS USING ORACLE CONSENSUS
US 12,620,122 B2	Target detection method and apparatus
EP 3 602 396 B1	EMBEDDED AUTOMOTIVE PERCEPTION WITH MACHINE LEARNING CLASSIFICATION OF SENSOR DATA
US 11,916,877 B2	System and method for the protected transmission of data
EP 3 925 851 B1	SYSTEM AND METHOD FOR ENTRY CONTROL OF A RAIL VEHICLE
EP 4 034 447 B1	ASSEMBLY COMPRISING AN ELONGATE HOUSING PART IN THE FORM OF A HOLLOW BODY AND A ROD-SHAPED COMPONENT FIXED THEREIN
EP 3 769 231 B1	A METHOD AND SYSTEM FOR PROVIDING A GENERIC QUERY INTERFACE
CN 117194988 B	一种能源负荷增量预测方法、装置及存储介质
CN 116113992 B	网格生成
US 12,562,572 B2	Method and system for unsupervised identification of behind-the-meter battery energy storage systems
TW I924164 B	製程中的產線配置方法
EP 3 759 695 B1	METHOD FOR PROVIDING PERSONAL ACCESS TO A PASSENGER SUB-AREA OF A PASSENGER AREA OF A TRACK-BOUND VEHICLE
US 12,639,939 B2	Incremental learning for anomaly detection and localization in images
EP 3 978 330 B1	ELASTIC ELEMENT AND RUNNING GEAR
EP 4 026 166 B1	ELECTRONIC MODULE WITH PULSATING HEATPIPE
EP 4 110 673 B1	COMFORT VENTILATION FOR A SANITARY MODULE FOR A VEHICLE
CN 112310442 B	方法、装置和轨道车辆
EP 4 433 345 B1	ARRANGEMENT FOR DRIVING A VEHICLE COUPLED TO A TRAILER
CN 112567382 B	用于可视化车辆的内部或外部的可视化设备和方法
CN 119209283 B	用于开关柜的底盘车的互锁机构、组件以及开关柜组柜
US 12,683,884 B2	System and method for simulation and testing of multiple virtual ECUs
EP 3 938 265 B1	METHOD FOR DETERMINING A TRACK OCCUPANCY, AND AXLE COUNTING DEVICE
EP 4 017 689 B1	ROBOTICS CONTROL SYSTEM AND METHOD FOR TRAINING SAID ROBOTICS CONTROL SYSTEM
US 11,853,969 B2	Managing artifact information, especially comparing and merging artifact information, method and system
EP 4 176 545 B1	METHOD AND SYSTEM FOR PROVIDING TIME-CRITICAL SERVICES
EP 4 327 137 B1	SENSOR DEVICE, RAIL VEHICLE AND SENSOR ASSEMBLY
US 12,334,283 B2	Fault detection in spring-loaded drives of medium-voltage switchgear systems
US 12,397,525 B2	Planning movements for a servo press
MX 421756 B	METODO PARA DETERMINAR LOS VALORES REALES SOBRE EL ESTADO
IN 569923 B	PERMANENT MAGNET SYNCHRONOUS MOTOR
DE 10 2021 210 641 B4	Herstellungsverfahren für ein Kontaktelement für Vakuumschalter, Kontaktelement sowie Vakuumschalter
CN 115490150 B	用于集装箱的吊装设备和检测集装箱朝向的方法
US 12,240,114 B2	Optimizing an automated process to select and grip an object via a robot
AU 2024213171 B2	Method for performing a technical process in regular operation and repair operation
US 11,981,358 B2	Arrangement for positioning a transformer in a rail vehicle
EP 4 122 790 B1	LOW FLOOR BOGIE WITH UNILATERALLY DRIVEN WHEEL SET SHAFT
MX 417003 B	MINIMIZACIÓN DE LA POTENCIA DEL VENTILADOR EN LA DISTRIBUCIÓN O EXTRACCIÓN DE AIRE
CN 115131468 B	用于制造工作流的辅助建模的系统和方法
EP 3 886 282 B1	SENSING A HIGH FREQUENCY ARC NOISE IN AN ARC FAULT DETECTION CIRCUIT INTERRUPTION (AFCI) DEVICE
CN 112868038 B	用于在事件驱动环境中制定业务流程的方法和系统
CN 115943352 B	用于使用机器学习的HVAC设备预测性维护的系统和方法
US 12,445,389 B2	Communication controller and method for transmitting time-critical data within a communication system
US 12,487,797 B2	Smart programming method for integrated CNC-robot
DE 10 2023 203 985 B3	Verfahren zur Erzeugung von Eingangsdaten für eine Zustandsschätzung eines Stromnetzes, Zustandsschätzung sowie Steuerung eines Stromnetzes
EP 4 240 622 B1	CONTROL DEVICE
EP 4 327 520 B1	METHOD AND APPARATUS FOR COUPLING THE FUNCTIONAL CONTROL IN A DISTRIBUTED AUTOMATION SYSTEM
US 12,655,919 B2	Valve actuator
CN 118043663 B	用于确定氢气浓度测量中的测量误差的方法和系统
DE 10 2017 218 269 B4	Verfahren zum Laden eines Energiespeichers

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,240,507 B2	Mid of train unit
CN 113574623 B	混合断路器、混合断路系统及断路方法
EP 3 853 680 B1	A GATEWAY AND METHOD FOR TRANSFORMING A DESCRIPTION OF AN INDUSTRIAL PROCESS EQUIPMENT INTO A DATA INFORMATION MODEL
EP 3 857 579 B1	ELECTRICAL STEEL SHEET HAVING A STRUCTURED SURFACE FOR DOMAINS REFINING
CN 115007942 B	控制飞锯设备的方法和装置
DE 10 2017 211 662 B4	Eingabesystem zur Ansteuerung eines elektrischen Geräts
US 12,224,623 B2	Electric motor
US 12,443,768 B2	Method, device and positioning system for positioning a sensor
US 12,024,024 B2	Wheel drive module of modular construction
EP 3 793 878 B1	RAIL VEHICLE WITH AN ASCENT AID
CN 115150210 B	补偿电阻公差的装置和连接通信设备的线路驱动器
EP 4 133 511 B1	FILM CAPACITORS
EP 4 465 166 B1	MICROSERVICE ORCHESTRATION METHOD AND APPARATUS, ELECTRONIC DEVICE, AND READABLE MEDIUM
US 12,684,349 B2	Method of onboarding a user device
BR 112021005859 B1	MÉTODO PARA DETECTAR REFLEXÕES EM UMA LINHA
CN 113177740 B	备件的储备管理方法、装置和可读介质
EP 4 079 596 B1	TRAIN INTEGRITY PROVING DEVICE AND METHOD
CN 111989856 B	三点式变流器的电路布置
CN 113396539 B	安全电开关
CN 111902327 B	轨道车辆的转向架
US 12,298,744 B2	High-availability cloud-based automation solution with optimized transmission times
US 12,074,726 B2	Method for data communication
AU 2023403725 B2	GRIT SYSTEM FOR A RAIL VEHICLE
US 12,146,513 B2	Axle receiving arrangement for an air vent rotary drive and air vent rotary drive
CN 116097189 B	生产过程中的质量问题的分类方法和装置
CN 114424443 B	可灵活设计的转换器单元
EP 4 367 704 B1	PROTECTIVE SWITCHING DEVICE
EP 4 305 587 B1	FILTERING SPECTRAL IMAGING WITH MINIMUM SPECTRAL CROSS-CONTAMINATION
US 12,508,643 B2	Method for producing a heat sink having fins and a peripheral side wall
EP 4 370 986 B1	CONTROL SYSTEM FOR A TECHNICAL INSTALLATION WITH SCALED DOWN VIEWS OF SYSTEM IMAGES
FR 3 147 040 B1	Circuit de protection à courant résiduel pour la détection d'un courant continu
EP 3 629 201 B1	ENGINEERING AUTOMATION USING QUANTIFICATION AND VISUALIZATION OF GLOBAL SENSITIVITIES IN SPATIAL TEMPORAL DOMAIN
US 12,492,975 B2	Method and system for generating a test coupon specification for predicting fatigue life of a component
EP 4 214 943 B1	A METHOD FOR DETERMINING A LOCATION OF A USER DEVICE IN AN INDUSTRIAL FACILITY
US 11,915,451 B2	Dense 6-DoF pose object detector
EP 4 320 491 B1	METHOD AND SYSTEM FOR SECURE EXECUTION OF CONTROL APPLICATIONS AND VERIFICATION DEVICE
EP 4 123 319 B1	METHOD, DEVICE AND A COMPUTER PROGRAM FOR ASSESSING THE SERVICE LIFE OF BATTERIES
CN 110858176 B	代码质量评估方法、装置、系统及存储介质
EP 4 179 395 B1	CONTROL OF A TECHNICAL SYSTEM WITH A PROCESSOR FOR ARTIFICIAL INTELLIGENCE
EP 4 476 119 B1	GHOST TRAIN DETECTION
TW I855373 B	閥門特性參數的檢測方法及裝置、閥門致動器、電子設備及電腦可讀儲存媒體
EP 4 038 459 B1	ONLINE MULTI-FORCE-ADAPTION DURING MACHINING
US 12,093,011 B2	Method and system for generating an artificial intelligence model
US 12,255,526 B2	Power converter with common mode filter
AU 2024219942 B2	Method for computer-aided running of a technical process in processing units
US 12,235,629 B2	Engineering system and method for configuring and parameterizing field bus subscribers
EP 4 328 462 B1	ACTUATING FORCE COUPLING
US 12,498,708 B2	Event-oriented transmission of measured process values
CN 111615673 B	一种用于工业控制中的技能匹配的系统
EP 3 861 410 B2	METHOD AND SYSTEM OF MONITORING THE OPERATION OF AT LEAST ONE DRIVE COMPONENT
CN 112385198 B	用于为第一设备设立授权证明的方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 455 948 B1	COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR OPERATING A TECHNICAL DEVICE
DE 10 2022 210 425 B4	Verbesserter Schalter und eine Schaltanlage mit einem derartigen verbesserten Schalter sowie ein Verfahren zum Schalten eines derartigen verbesserten Schalters.
CN 113544708 B	用于时间序列数据的基于簇的分类
CN 113939823 B	用于多用户空间影响分析与管理的系统和方法
JP 7559101 B2	ダイナモエレクトリック回転機の材料層および材料層構造の製造方法
CN 113219862 B	实施现场总线用户的配置和参数化的方法和接口模块
CN 116057393 B	用于电气开关设备的状态确定的方法、用于电气开关设备的监视单元和电气开关设备
EP 4 377 181 B1	RAIL VEHICLE HAVING A CARRIAGE COUPLING DEVICE
US 11,782,873 B2	System and method for managing timeseries data
CN 112585574 B	用于确定在分布式网络环境中所要安装的应用程序的适合的安装位置的方法和系统
CN 113168347 B	容器化应用程序的编排
EP 3 700 765 B1	VEHICLE HAVING TEMPERATURE CONTROL FOR THE PASSENGER INTERIOR
CN 114746855 B	文档处理的方法和装置
CN 113258668 B	远程驱动器、装置及测试方法
EP 3 942 372 B1	METHOD FOR VALIDATING SYSTEM PARAMETERS OF AN ENERGY SYSTEM, METHOD FOR OPERATING AN ENERGY SYSTEM, AND ENERGY MANAGEMENT SYSTEM FOR AN ENERGY SYSTEM
EP 3 948 557 B1	COMMUNICATION DEVICES AND SYSTEMS
EP 4 277 803 B1	MULTILAYER BRAKING RESISTOR DEVICE FOR A VEHICLE
IN 466007 B	GAS ANALYZER FOR MEASURING NITROGEN OXIDES AND SULFUR DIOXIDE IN EXHAUST GASES
CN 110495138 B	工业控制系统及其网络安全的监视方法
EP 4 239 420 B1	INDUSTRIAL CONTROL SYSTEM AND METHOD FOR OPERATING AN INDUSTRIAL CONTROL SYSTEM
US 12,216,460 B2	Method for engineering and simulating an automation system via digital twins
CN 114245768 B	机器人关节及机器人
CN 114255259 B	对象追踪方法、装置和计算机可读介质
CN 115087936 B	确定车床的切削样式的方法、控制设备以及车床
CN 114050542 B	用于确定电力系统中异常采样点的方法与装置
EP 4 291 459 B1	COACH BODY FOR A RAIL VEHICLE
EP 4 031 949 B1	METHODS AND SYSTEMS FOR PROVIDING DATA FROM AN INTERNAL DATA PROCESSING SYSTEM OF AN INDUSTRIAL PLANT TO AN EXTERNAL DATA PROCESSING SYSTEM
US 12,021,473 B2	Control for an electromagnetic holding brake
US 12,480,681 B2	Actuator for a damper and method thereof
CN 115076713 B	用于调节燃烧设备的方法和计算机程序以及燃烧设备
IN 519581 B	METHOD FOR SELF-LEARNING MANUFACTURING SCHEDULING FOR A FLEXIBLE MANUFACTURING SYSTEM BY USING A STATE MATRIX AND DEVICE
US 12,545,307 B2	Reconfigurable PCB for brake operation of exit and entrance crossing gate mechanism
US 12,037,207 B2	Method and assembly unit for assembling non-electric components onto a component carrier
CN 112819251 B	供热阀门开度控制方法、装置和计算机可读介质
US 12,265,367 B2	Artificial intelligence (AI) companions for function blocks in a programmable logic controller (PLC) program for integrating AI in automation
CN 111078438 B	处理数据的方法和装置
US 11,790,128 B2	Machine learning-based part determinations for computer-aided design (CAD) assemblies
EP 4 025 965 B1	INTEGRITY MONITORING SYSTEM AND METHOD FOR OPERATING AN INTEGRITY MONITORING SYSTEM AND AN INTEGRITY MONITORING UNIT
CN 118159945 B	使容器实例对文件系统资源中的文件的访问优先化
DE 10 2023 200 638 B3	Zubehör für einen elektrischen Schalter und elektrischer Schalter mit solch einem Zubehör
CN 116075873 B	用于火灾探测器的自动标识的方法
EP 4 208 704 B1	DEVICE FOR MONITORING A SHAFT COUPLING, COUPLING A FIRST SHAFT AND A SECOND SHAFT
CN 109995069 B	用于单元电网的虚拟逆变器控制装置以及单元电网
US 11,898,616 B2	Vibration damping system and machine tool
US 11,922,134 B2	Physics informed neural network for learning non-Euclidean dynamics in electro-mechanical systems for synthesizing energy-based controllers
CN 114786986 B	用于车辆的集电器的摇杆
EP 3 696 629 B1	METHOD FOR MONITORING AN INDUSTRIAL INSTALLATION, COMPUTER PROGRAM, COMPUTER-READABLE MEDIUM AND SYSTEM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 680 956 B1	ELECTROLYZER, METHOD FOR MEASURING THE CONCENTRATION OF A GAS COMPOSITION IN AN ELECTROLYZER, COMPUTER PROGRAM PRODUCT AND SIMULATION PROGRAM PRODUCT
EP 4 315 028 B1	AUTOMATIC ARRANGEMENT OF HMI SCREENS
US 12,130,198 B2	Acoustic analysis of a state of a machine
CN 112997466 B	用于配置访问保护系统的方法和设备
CN 113906206 B	基于从属控制技能的自动学习的机器控制
CN 112446104 B	真实设备与其数字孪生之间的偏差的识别
CN 111867913 B	用于轨道车辆的车厢下设备支架
EP 4 059 807 B1	METHOD FOR OPTIMIZED ALLOCATION OF MOVEMENT AUTHORITY FOR A RAIL VEHICLE/TRAIN
CN 116773154 B	用于监控工艺技术设施的部件的状态的方法和装置
US 11,945,105 B2	Toothed safe braking apparatus for robotic joint, robotic joint, and robot
US 12,248,306 B2	Abstraction of PLC communication
US 11,883,947 B2	Machine learning enabled visual servoing with dedicated hardware acceleration
EP 4 121 897 B1	METHOD AND SYSTEMS FOR PROVIDING SYNTHETIC LABELLED TRAINING DATA SETS AND USE OF SAME
EP 4 381 386 B1	PRIORITIZING OF ACCESS FROM A CONTAINER ENTITY TO A FILE IN A FILE SYSTEM RESOURCE
DE 10 2018 211 614 B4	Verkleidungselement und Stromverteiler
DE 10 2020 208 426 B4	Kurzschlussstrombegrenzer
CN 111372809 B	用于检测由充电站传输的电能的测量设备和方法
EP 4 228 948 B1	RUNNING GEAR FOR A RAIL VEHICLE
US 11,845,474 B2	Arrangement for a rail vehicle
US 12,678,894 B2	Method for welding an attachment piece to a semiconductor metallisation by laser welding
EP 4 077 024 B1	PANTOGRAPH FOR CURRENT COLLECTOR OF A VEHICLE
CN 113377793 B	非易失性存储器的数据块的更新方法及更新装置
EP 4 147 259 B1	CARRIER FOR AT LEAST ONE SWITCHING DEVICE AND SWITCHGEAR COMPRISING SUCH CARRIER
EP 4 178 101 B1	VIBRATION-BASED STATE MONITORING OF ELECTRIC ROTARY MACHINES
CN 114764435 B	一种故障模式预测方法、装置和计算机可读介质
CN 114777818 B	编码器的信号激励单元及编码器
EP 3 900 186 B1	PROTECTION OF A SEMICONDUCTOR SWITCH
CN 114097156 B	用于将容性负载装置接通到直流电网的方法及设备
EP 3 857 580 B1	PRINTED ELECTRICAL SHEET
EP 4 308 431 B1	BOGIE FOR A RAIL VEHICLE
EP 4 058 336 B1	FASTENING DEVICE FOR ELASTICALLY SUSPENDING A VEHICLE COMPONENT
EP 3 918 429 B1	METHOD AND DEVICE FOR CONTROLLING A WATER SUPPLY NETWORK
US 12,001,516 B2	Method and assistance system for parameterizing an anomaly detection method
US 12,517,985 B2	Method for restoring license keys in a modular automation station, automation station and method for operating the automation station
CN 113557649 B	用于电机的电工钢片和用于电工钢片的制造方法
IN 580259 B	FAULT DIAGNOSIS METHOD AND APPARATUS THEREFOR
US 12,410,935 B2	Computerized device and computer-implemented method for controlling a HVAC system
US 12,109,704 B2	Simulation signature keys for robotic simulations
CN 114731304 B	经由无线电接口远程激活控制设备的无线服务接口
CN 115104294 B	在工业网络的多租户虚拟网络中载入设备
US 12,075,240 B2	Authentication method and apparatus
CN 112154336 B	确定性星体内建自测
US 12,253,067 B2	Actuator device having power spring retention
CN 115004118 B	用于配置和参数化现场总线用户的方法和工程系统
CN 114365255 B	保护开关装置、保护开关系统和方法
EP 4 066 071 B1	METHOD AND SYSTEM FOR ADJUSTING THE PARAMETERS OF A SYSTEM MODEL
EP 4 158 433 B1	METHOD AND SYSTEM FOR FAILURE CAUSE ANALYSIS IN A PROCESS PLANT
EP 4 143 960 B1	POWER CONVERTER AND METHOD FOR OPERATING A POWER CONVERTER
AU 2023325743 B2	DEVICE AND METHOD FOR DETECTING AN OBSTRUCTION OF A RAILROAD CROSSING GATE
CN 116018885 B	壳体和电气设备

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 437 695 B1	SYSTEM AND METHOD FOR ENABLING SCALABLE PROCESSING THROUGHPUT OF HIGH-VOLUME DATA ON INDUSTRIAL CONTROLLERS
US 12,627,525 B2	Network switch, communication system and method for operating a communication system for transmitting time-critical data
CN 115684969 B	用于确定电池储能器的残值的方法、装置和计算机程序产品
EP 4 091 970 B1	DEVICE FOR LIFTING LOADS
IN 520648 B	ABSTRACTION LAYERS FOR AUTOMATION APPLICATIONS
EP 3 916 434 B1	WHEEL DETECTOR AND METHOD FOR DETECTING A TRACK-BOUND WHEEL
EP 4 537 024 B1	SYSTEM AND METHOD FOR CONTROLLING A MULTI-ZONE DUAL DECK AIR HANDLING UNIT
EP 4 262 250 B1	A RADIO UNIT FOR PROVIDING NETWORK CONNECTIVITY TO ONE OR MORE USER EQUIPMENT ONBOARD A VEHICLE
EP 4 172 704 B1	SYSTEMS AND METHODS FOR HVAC EQUIPMENT PREDICTIVE MAINTENANCE USING MACHINE LEARNING
US 11,784,486 B2	Low-voltage circuit breaker and power measuring arrangement
US 12,271,185 B2	Method for identifying a process-disrupting automation component in a concatenated automation assembly
EP 4 163 594 B1	WAYFINDING AND GUIDANCE TO ASSETS, DEVICES AND SENSORS IN BUILDINGS
DE 10 2024 209 534 B3	Antriebssystem für ein Schienenfahrzeug
US 12,444,918 B2	Protection device and method for monitoring an electrical energy supply grid
CN 109993002 B	一种数据完整性保护方法和装置
EP 3 966 723 B1	METHOD AND ARRANGEMENT FOR PROVIDING DATA FROM AN INDUSTRIAL AUTOMATION ARRANGEMENT TO AN EXTERNAL ARRANGEMENT
CN 115113590 B	用于控制生产设备制造产品的方法和系统
CN 115638917 B	压力测量装置、测量方法以及计算机程序产品
US 11,822,317 B2	Operator-defined avoidance of chatter
US 11,889,660 B2	Cooling device for an electrical switching installation and method for operating a cooling device of this kind
CN 115244829 B	具有间隙套管的电动机
US 11,912,138 B2	Method and device for braking a train set
EP 4 478 160 B1	METHOD AND SYSTEM FOR GENERATING HUMAN DIGITAL TWIN FOR VIRTUAL ENVIRONMENT
CN 111213149 B	过程设计与分析的系统和方法
EP 3 800 448 B1	ULTRASONIC FLOW METER
EP 3 577 003 B1	VEHICLE HAVING A DETECTION DEVICE FOR DETECTING A ROUTE-SIDE TRANSMITTER DEVICE AND METHOD FOR OPERATING SAME
EP 3 988 255 B1	METHOD AND ASSEMBLY UNIT FOR ASSEMBLING NON-ELECTRIC COMPONENTS ONTO A COMPONENT-CARRIER
US 12,487,183 B2	Method for analyzing an electrode layer of a battery storage device, method for producing a battery storage device, and production unit
US 12,047,195 B2	Remote activation of the wireless service interface of a control device using a peripheral device
CN 114424134 B	使自动化过程内的非生产性空闲时间最小化的系统和方法
US 11,797,719 B2	Dynamic preview generation in a product lifecycle management environment
US 12,462,143 B2	Evaluation framework for time series data
US 12,395,402 B2	Method and apparatus for configuring an application
CN 112753206 B	工业通信网络内数据传输的方法和通信设备
EP 3 809 214 B1	METHOD FOR CONFIGURING AN INTERFACE DEVICE AND INTERFACE DEVICE THEREBY
US 11,816,827 B2	User interface device for autonomous machine vision inspection
CN 114503037 B	用于柔性自动化工程程序的队列块
US 12,695,290 B2	Method for operating an electronic circuit breaker, electronic circuit breaker, and electric system comprising an electronic circuit breaker
EP 4 352 577 B1	METHOD FOR OPERATING A TOOL AND / OR PRODUCTION MACHINE
EP 3 877 205 B1	VEHICLE
EP 4 060 559 B1	TRAINING DATA SET, TRAINING AND ARTIFICIAL NEURAL NETWORK FOR ESTIMATING THE CONDITION OF A POWER NETWORK
US 12,594,973 B2	Step device for a rail vehicle
US 11,900,646 B2	Methods for generating a deep neural net and for localising an object in an input image, deep neural net, computer program product, and computer-readable storage medium
KR 102660981 B1	실제 상태 값들을 결정하기 위한 방법
IN 532947 B	METHOD FOR FUNCTIONALLY SECURE CONNECTION IDENTIFICATION
IN 584352 B	METHOD AND ASSEMBLY FOR MANAGING AUTOMATION PROGRAMS FOR INDUSTRIAL AUTOMATION PLATFORMS
EP 3 782 872 B1	SYSTEM AND METHOD FOR ENABLING A POSITION DETERMINATION OF A VEHICLE IN A TUNNEL
EP 4 056 451 B1	METHOD AND SYSTEM FOR REGULATING GUIDED VEHICLES HEADWAYS

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115302857 B	偏心结构的间隙调整方法及装置、计算设备、介质
CN 114556238 B	用于在云计算环境中生成资产信息的数字表示的方法和系统
US 11,874,639 B2	Auditor system and method for a building management system environment
DE 10 2023 203 960 B3	Betriebsverfahren für ein Feldgerät, Computerprogrammprodukt, Feldgerät, übergeordnete Steuereinheit und Automatisierungssystem
US 12,066,817 B2	Method and system for manufacturing industrial goods using influence diagram mapped to maximum expected utilities
US 11,927,643 B2	Method, device and system for recognizing an electrical oscillation in an electrical power supply system
CN 112639640 B	冗余热备控制系统、控制设备、冗余热备方法及计算机可读存储介质
EP 4 509 253 B1	METHOD FOR MONITORING A FLUX APPLICATION, COMPUTER PROGRAM AND COMPUTER SYSTEM
EP 4 275 018 B1	AN ELECTROMAGNETIC FLOWMETER WITH PRIMARY AND SECONDARY PAIRS OF COILS
US 12,561,301 B2	Filtered product structure
DE 10 2022 204 893 B4	Niederspannungs-Motor-Control-Center mit Bediengerät
CN 116508009 B	用于可重构硬件建模电路中的SerDes通信信道的混合切换架构
EP 4 237 271 B1	CONNECTOR FOR DRIVE UNITS
US 12,047,299 B2	Computer program and method for data communication
DE 10 2025 100 150 B4	Verfahren und Vorrichtung zur Ermittlung des Luftverbrauchs einer Luftfeder
EP 3 887 835 B1	DEVICE AND METHOD FOR AUTOMATIC TESTING OF A SWITCHING BODY
US 12,442,887 B2	Method and system for radio transmission of data related to a production installation
EP 4 264 818 B1	POWER CONVERTER ASSEMBLY
US 12,332,145 B2	Apparatus for monitoring a power capacitor and adapter for such an apparatus
CN 114611327 B	中低压开关柜中主导电回路的温升计算方法及装置
CA 3212224 C	SOLID-STATE CIRCUIT BREAKER CONFIGURED TO DISCHARGE AND DISSIPATE RECOVERY VOLTAGE
US 12,009,651 B2	Atmospheric vent system for a busway enclosure of an outdoor busway system
CN 113366515 B	用于模拟系统操作条件的系统和方法
EP 4 268 029 B1	METHOD AND SYSTEM FOR MONITORING THE OPERATION OF A TECHNICAL SYSTEM
US 11,809,168 B2	Method, apparatus and system for displaying measurement information
DE 10 2024 208 076 B4	Leistungsschalter und Unterspannungsauslöser eines Leistungsschalters
EP 3 940 596 B1	METHOD FOR CONFIGURING A CONTROL AGENT FOR A TECHNICAL SYSTEM AND CONTROL DEVICE
EP 4 007 990 B1	METHOD FOR THE ANALYSIS OF IMAGE INFORMATION WITH ASSOCIATED SCALAR VALUES
EP 4 056 331 B1	SECURE OPERATION OF MULTIPLE-AXLE KINEMATIC
EP 3 788 701 B1	ROBUST LAYERS OF MATERIAL
EP 3 679 417 B1	SECURE SPECTACLE-TYPE DEVICE AND METHOD
US 12,613,686 B2	Software module deployment methods and apparatus
US 12,570,332 B2	Chassis for a rail vehicle
US 11,845,342 B2	Current collector and non-track-bound, electrically driven vehicle with a current collector of this kind
EP 3 753 035 B1	SWITCHING KINEMATICS FOR VACUUM INTERRUPTERS AND METHOD FOR ADAPTING A KEEP-OPEN TORQUE TRANSMITTED TO A SWITCH SHAFT
EP 3 853 990 B1	3-LEVEL ACTIV NEUTRAL POINT CLAMPED (ANPC) HYBRID INVERTER
US 12,452,036 B2	Method for configuring a security module with at least one derived key
CN 113666265 B	起重机的控制方法、装置、电子设备和存储介质
US 12,209,737 B2	Remote controlled light adjustment device and associated method
CN 116894235 B	用于安全执行控制应用程序的方法、系统、主机
US 12,259,716 B2	Method and industrial automation system with a system for embedding a web application to be embedded in a surrounding web application
EP 4 136 826 B1	METHOD FOR DATA COMMUNICATION
CN 114650958 B	用于以计算机实施的方式配置物流系统的受控驱动应用的方法
EP 3 775 945 B1	FAULT DETECTION IN POWER SUPPLY TO A LOAD IN TERMS OF A BROKEN WIRE DETECTION FOR A FUNCTIONAL SAFETY DC OUTPUT
CN 111108449 B	在可编程逻辑控制器(PLC)中自主添加和删除功能的装置和方法
US 12,265,363 B2	Controlling an operation of a technical system automatically
US 12,287,042 B2	Actuator having an electric motor and an electromagnet arranged movably on the rotor of the electric motor to apply a holding torque with contact via a remanent magnetic field
US 12,256,025 B2	Method and control system for technical installations with certificate management
CN 111095766 B	驱动器组中的中间电路耦连

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 900 998 B1	SYSTEM AND METHOD FOR FACILITATING ACCESS TO A GUIDED VEHICLE
BR 102020010058 B1	Método, dispositivo e sistema para determinação de um arco em uma linha de transmissão de energia
US 12,489,621 B2	Providing data to be protected in a secured execution environment of a data processing system
EP 4 344 976 B1	METHOD FOR PRODUCING A BASE FRAME FOR A CAR BODY OF A RAIL VEHICLE AND BASE FRAME
CN 108768219 B	变频器制动电路及变频器制动装置
EP 3 994 533 B1	NUMERICAL CONTROLLER WHICH CAN BE ADJUSTED BY THE MACHINE MANUFACTURER
DE 10 2018 204 041 B4	Brandschutzschalter, Niederspannungsstromkreis und Verfahren für serielle Fehlerlichtbögen
CN 113302812 B	用于在直流电压供电网中提供故障电流的脉冲电路
EP 4 172 024 B1	STEP FOR A RAIL VEHICLE
GB 2632234 B	Railway Interlocking System and Method
JP 7551691 B2	二次電池の寿命を推定する方法、装置およびコンピュータプログラム製品
IN 594170 B	SWITCHGEAR DEVICE
EP 3 771 612 B1	DRAFTING DEVICE AND METHOD FOR OPERATING SAME
US 12,305,855 B2	Air-fuel mixer and combustion system
US 12,162,364 B2	Vehicle comprising a standby power supply device and method for operating same
AT 526587 B1	Verstärkungsrahmen
MX 428705 B	RED DE DISTRIBUCIÓN MEDIANTE UNA COMUNICACIÓN Y ENERGÍA EN COMUN
EP 4 147 543 B1	HOUSING AND ELECTRICAL DEVICE
US 12,669,802 B2	Discover match use (DMU) automation system
EP 3 890 928 B1	FORCE-LIMITED METHOD OF AT LEAST ONE ELEMENT OF A PRODUCTION MACHINE IN MANUAL OPERATION
CN 112567584 B	功率转换器控制器的电网阻抗估计
CN 113615085 B	用于半导体开关的保护电路
CN 112585861 B	机器的运行方法、存储介质、控制装置和机器
CN 115913433 B	具有VLAN间转发的PTP透明时钟
US 12,553,559 B2	Coolant-collecting device
EP 4 401 318 B1	POWER CONVERTER AND TRACE SYSTEM FOR A POWER CONVERTER
EP 4 144 576 B1	VEHICLE, IN PARTICULAR RAIL VEHICLE WITH ENERGY STORAGE AND COOLING DEVICE
US 12,095,246 B2	Diagnostic system for a level-crossing safeguarding system, current sensor for such a diagnostic system, and method for installing such a diagnostic system
CN 116834426 B	相机触发位置确定方法、装置和电子设备
EP 4 165 484 B1	MONITORING DEVICE AND METHOD FOR DETECTION OF ABNORMALITIES
CN 113037491 B	用于自动化系统的运行方法及自动化系统
US 11,791,734 B2	Parallel bidirectional flyback converters with valley switching
EP 4 460 832 B1	PROCESS ENGINEERING MODULE AND METHOD FOR CONTROLLING A PROCESS ENGINEERING MODULE
US 12,135,996 B2	Computing resource scheduling method, scheduler, internet of things system, and computer readable medium
EP 4 261 722 B1	OUTPUT OF A SHARED CRYPTOGRAPHICALLY PROTECTED DEVICE CONFIGURATION INFORMATION
US 11,846,926 B2	Negotiation-based method and system for coordinating distributed MES order management
CN 113039764 B	提供对存储在云平台的安全数据区中的数据的访问的方法和系统
US 12,561,507 B2	Machine learning-based hotspot prediction in electronic design automation (EDA) applications
CN 113168167 B	用于制造产品的方法和装置以及计算机可读存储介质
EP 4 401 049 B1	RUNTIME ASSESSMENT OF SUCTION GRASP FEASIBILITY
CN 114462460 B	用于异常检测的机器学习分类任务的优化方法和装置
US 12,205,783 B2	Apparatus for opening or closing a DC circuit, and method for automatically closing a DC circuit
EP 4 244 955 B1	PERMANENTLY MAGNETIC SYNCHRONOUS MOTOR
US 12,203,989 B2	Method and apparatus for determining a saturation characteristic of a synchronous reluctance machine
EP 4 511 264 B1	ESTIMATING DEVICE AND METHOD FOR DETERMINING ESTIMATED MOVEMENT VALUES
EP 4 330 629 B1	SYSTEM AND A METHOD FOR ANALYZING THE MOTIONS OF A MECHANICAL STRUCTURE
CN 115285450 B	颗粒包装机对标方法、系统、颗粒包装机及存储介质
US 12,278,565 B2	Method for regulating a buck-boost converter having two switching elements and an inductance and via which an input voltage is converted into regulated output voltage
CA 3128759 C	PREVENTION OF COLLISION BETWEEN TRAINS
US 12,246,760 B2	Anti-climber device for a rail vehicle
CN 110873195 B	控制阀及用于其的阀体芯组件

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 267 448 B1	PROCEDURE FOR CONFIGURATION OF A CONTROL SOFTWARE ON A RAIL VEHICLE
US 12,039,081 B2	Method and arrangement for providing data from an industrial automation arrangement to an external arrangement
US 12,187,298 B2	Method and apparatus for monitoring operation of a technical object
US 12,511,465 B2	Defect diagnosis with dynamic root cause detection
EP 3 942 603 B1	ELECTRONIC SWITCHING CIRCUIT AND METHOD FOR PRODUCING SAME
EP 3 997 467 B1	METHOD FOR CHECKING LOAD CIRCUITS IN A TECHNICAL INSTALLATION
EP 4 208 760 B1	METHOD AND CONFIGURATION SYSTEM FOR CONFIGURING A CONTROL DEVICE FOR A TECHNICAL SYSTEM
US 11,886,161 B2	Configuring and building an automation system to perform rule-based transformations on complex technical systems
EP 4 441 786 B1	SEMICONDUCTOR DEVICE COMPRISING AT LEAST ONE SEMICONDUCTOR ELEMENT AND A FIRST CONNECTING ELEMENT
US 12,196,810 B2	Production of a quality test system
CN 114815679 B	用于呈现警报显示的负荷管理
JP 7732079 B2	モジュール式プラントのデジタルツインモデルに基づいてシミュレーションの構成をオーケストレーションするコンピュータ実行方法及びオーケストレーションシステム
EP 4 446 829 B1	METHOD AND SYSTEM FOR AUTOMATED MANAGEMENT OF CHARGING UNIT
CN 117246562 B	灌装量的控制方法及控制系统
EP 4 046 098 B1	METHOD FOR ALLOCATING SEATS IN A LAND VEHICLE
US 11,869,143 B2	Cutting method, apparatus and system for point cloud model
CN 111832016 B	跟踪指令执行
EP 3 984 338 B1	SUPPORT FOR ELECTRICAL COMPONENTS
IN 595335 B	METHOD AND CONTROL DEVICE FOR CONTROLLING A TECHNICAL SYSTEM
US 12,011,835 B2	Engineering autonomous systems with reusable skills
AU 2023204670 B2	Sensor fusion for transit applications
EP 4 004 889 B1	METHOD, DEVICE AND RAIL VEHICLE
EP 4 031 434 B1	VEHICLE, IN PARTICULAR RAIL-MOUNTED, AND METHOD FOR DETERMINING WHETHER THE VEHICLE HAS LEFT A PREDEFINED ROUTE
US 12,652,309 B2	Method for providing real time zero trust security in a shared resource network
CN 113677541 B	用于车辆的轮组
EP 4 587 847 B1	DETERMINING AN ELECTRICAL ENERGY FLOW
CN 110268401 B	一种量化缺陷的方法
EP 4 200 734 B1	METHOD FOR OPERATING A NETWORK, AND COMPUTER PROGRAM PRODUCT
CN 111201509 B	创建软件应用时对使用者进行支持的方法和实现该方法的计算机程序及在该方法中可用的编程接口
CN 112714713 B	无轨电动车辆
EP 4 251 953 B1	ENCODER OUTLET STRUCTURE AND ENCODER
US 12,657,969 B2	Critical scenario identification for verification and validation of vehicles
CN 114556437 B	生成部件网格的方法、部件网格的使用方法、计算机程序和计算机可读介质
CN 116761997 B	用于监视将第一轴与第二轴联接的联轴器的装置
US 11,915,990 B2	Method for manufacturing a power module unit
EP 4 143 587 B1	CURRENT MEASURING DEVICE WITH HALL SENSORS
EP 4 070 226 B1	MACHINE LEARNING-BASED SELECTIVE INCARNATION OF COMPUTER-AIDED DESIGN OBJECTS
US 12,346,086 B2	Reduction of friction within a machine tool
CN 114928280 B	异步发电机的启动方法及变频器系统
US 12,159,763 B2	Vacuum switching device for a circuit having a main current path and an auxiliary current path
IN 545849 B	METHOD FOR ESTABLISHING A STREAM, METHOD FOR PROVIDING STREAM IDENTIFICATION INFORMATION, USE OF A DNS SERVER, DEVICE, COMPUTER PROGRAM, AND COMPUTERREADABLE MEDIUM
US 12,187,002 B2	Method and evaluation device for monitoring a vulcanization process of a vehicle tire in a tire heating press
US 12,481,809 B2	Adaptive user interfaces for computer-aided technology applications
EP 4 057 482 B1	METHOD AND DEVICE FOR ESTIMATING THE CONDITION OF AN ELECTRICAL NETWORK
US 12,321,140 B2	Motion control method and apparatus
EP 3 876 256 B1	SWITCHING DEVICE FOR ELECTRIC POWER DISTRIBUTION
EP 4 530 924 B1	METHOD FOR OPERATING A PLURALITY OF RFID READERS AND CONTROL AND MONITORING UNIT FOR RFID READERS
US 12,003,091 B2	Circuit breaker device for DC voltage
CN 113647019 B	半导体开关的线路布置
EP 4 619 723 B1	SYSTEM FOR DIAGNOSING WHEEL SET BEARINGS

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 018 277 B1	EVENT-ORIENTED TRANSMISSION OF PROCESS MEASUREMENT VALUES
EP 4 073 602 B1	CONTROL SYSTEM FOR TECHNICAL INSTALLATIONS WITH CERTIFICATE MANAGEMENT
US 12,596,149 B2	Diagnosing identical circuit blocks in data streaming environment
EP 4 019 796 B1	BRAKE ASSEMBLY AND ROBOT JOINT WITH SAME, AND ROBOT
CN 115284733 B	凹版印刷机启动控制系统及方法
CN 113613982 B	用于轨道车辆的防爬覆装置
EP 3 677 055 B1	MOBILE TAG SENSING AND LOCATION ESTIMATION
EP 3 987 480 B1	IMAGE-BASED DEFECT DETECTIONS IN ADDITIVE MANUFACTURING
IN 590826 B	TIME-STAMPING FOR INDUSTRIAL UNIDIRECTIONAL COMMUNICATION DEVICE WITH DATA INTEGRITY MANAGEMENT
CN 116034325 B	检测异常数据点的系统、设备和方法
CN 113811970 B	联接器、弹簧系统、驱动系统以及中压设备
US 12,362,114 B2	Compact vacuum interrupter
US 12,165,804 B2	Electrical steel sheet with structured surface for domain refining
AU 2023263425 B2	Train control systems with hazard management and associated methods
CN 114731306 B	经由总线系统远程激活控制设备的无线服务接口
US 11,880,382 B2	Systems and methods for generating tables from print-ready digital source documents
AT 528140 B1	Stromversorgungsvorrichtung, Stromversorgungseinrichtung und Fahrzeug
US 12,071,029 B2	Current collector arrangement for a vehicle
US 11,860,764 B2	Method, apparatus, and system for evaluating code design quality
CN 115335132 B	用于抗菌和/或抗病毒用途的纤维材料、过滤器、口鼻防护装置、用于口鼻防护装置的嵌件以及制造纤维材料的方法
IN 467670 B	AUTONOMOUS RESTORATION OF POWER SYSTEMS AFTER NATURAL DISASTERS
EP 4 555 393 B1	METHODS AND SYSTEMS FOR MONITORING TIMESTAMPS IN A DATA ACQUIRED BY DATA ACQUISITION DEVICES IN AN INDUSTRIAL ENVIRONMENT
GB 2626134 B	Digital application platform architecture
CN 111819828 B	运行通信系统的方法以及通信系统
EP 3 817 205 B1	CIRCUIT ARRANGEMENT FOR EVALUATING AN INPUT VOLTAGE OF A POWER SUPPLY AND ASSOCIATED METHOD
US 12,687,463 B2	Sensor and housing arrangement for gas analysis
EP 3 541 153 B1	FLEXIBLE CIRCUIT BOARD AND CIRCUIT BREAKER USING A FLEXIBLE PRINTED CIRCUIT BOARD
CN 114144577 B	混合动力车辆
CN 115380509 B	用于将设备数据插入到分布式数据库系统中的装置和方法
KR 102953514 B1	전력 변환 장치 및 전력 변환 장치용 트레이스 시스템
US 12,481,277 B2	Monitoring device and method for detecting anomalies
EP 4 548 064 B1	METHOD FOR PROVIDING A PHYSICALLY EXPLAINABLE FAULT INFORMATION OF A BEARING BY A FAULT DETECTION MODEL
EP 3 713 805 B1	BOGIE FOR A RAIL VEHICLE
CN 114567229 B	电机的控制方法
EP 3 670 106 B1	TASK-SPECIFIC ROBOT GRASPING SYSTEM AND METHOD
AT 527935 B1	Ballistische Schutzanordnung für Fahrzeuge, Radsatzwelle und Bearbeitungsverfahren
EP 3 756 172 B1	APPARATUS FOR COPYING AND SECURING DATA FROM A JOURNEY RECORDING SYSTEM IN RAIL TRANSPORT
EP 4 423 784 B1	CONTACT CARRIER, CONTACT-CARRIER ARRANGEMENT AND LOW-VOLTAGE PROTECTIVE SWITCHING DEVICE
US 11,895,190 B2	Energy-efficient communication between sensor and satellite
CN 114730169 B	认知工程的自动化工程学习框架
EP 4 306 823 B1	ACTUATING FORCE COUPLING
EP 3 841 513 B1	INTERFACE CONNECTIVITY FOR PRINTED CIRCUIT BOARD SCHEMATIC
EP 3 801 644 B1	SYSTEMS AND METHODS FOR INTELLIGENT DISINFECTION OF DISINFECTION ENVIRONMENTS THROUGH USE OF ULTRA-VIOLET LIGHTS
US 12,393,420 B2	System and computer-implemented method for controlling a software development and operations system on the basis of measured quality data representing at least one quality and/or performance indicator
US 12,576,691 B2	Method for monitoring an air-conditioned passenger compartment of a vehicle, and air-conditioning arrangement for carrying out such a method
CN 114745403 B	工业网络通信系统和工业网络通信方法
CN 112585544 B	用于人工智能的基于可编程逻辑控制器的模块化加速模块
IN 554434 B	SYSTEM AND METHOD FOR MANAGING CURRENT OF A NOTIFICATION APPLIANCE CIRCUIT
US 12,599,030 B2	Power semiconductor module system and method for producing the power semiconductor module system
CN 115376262 B	抽取式烟雾检测器及其操作方法和计算机程序产品

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
DE 10 2022 213 953 B4	Verfahren und Vorrichtung zur Bestimmung eines Wartungsbedarfs eines Wärmetauschers
CN 111684419 B	在计算节点之间迁移容器编排平台中的容器的方法和系统
US 12,542,554 B2	Module with selectable digital outputs
EP 4 270 720 B1	AUTOMATIC, SECURE AND BULK ONBOARDING OF DEVICES
US 12,585,936 B2	Neural logic controllers
IN 565873 B	TRANSMISSION DEVICE FOR TRANSMITTING DATA
EP 4 487 183 B1	SYSTEMS AND METHODS FOR COMPUTER-AIDED MACHINING
US 12,122,143 B2	Method for stencil printing a layer and printing device
CN 112650547 B	用于可视化屏幕内容的方法以及相应的数据可视化系统
US 11,789,434 B2	Method and control system for technical plants
AT 524931 B1	Wagenkasten für ein Schienenfahrzeug
CN 111817429 B	用于电力系统中电源切换的方法和装置
US 11,838,409 B2	Method and apparatus for transferring data in a publish-subscribe system
CN 113811824 B	用于管理和优化现场设备和自动化设备之间的连接的系统、设备和方法
CN 115917557 B	基于机器学习的系统架构确定
CN 115568287 B	设备组构建方法与装置
EP 4 091 026 B1	METHOD AND SYSTEM FOR IDENTIFYING A PROCESS-DISRUPTING AUTOMATION COMPONENT IN A CONCATENATED AUTOMATION ASSEMBLY
EP 4 244 878 B1	VACUUM INTERRUPTER
CN 114448655 B	技术设施的证书管理
CN 113330380 B	用于管理警报的方法、装置和系统
US 12,184,065 B2	Method and regulating device for regulating an electrical power transfer
EP 4 016 577 B1	ELECTRICAL INTERMEDIATE DEVICE, ESPECIALLY FOR A RAIL VEHICLE
EP 4 108 951 B1	BRAKE ACTUATOR AND BRAKE UNIT FOR A VEHICLE BRAKE
US 12,411,998 B2	Self-intersecting lattice incarnation
US 12,224,169 B2	Interactive analysis of mass spectrometry data
US 12,454,293 B2	System and method for automatic wheel diameter measurement and calibration
CN 112204485 B	用于解决多部件系统的自动故障树分析中的闭环的计算机实现的方法和设备
EP 3 871 375 B1	LIGHTING CONTROL SYSTEM CONFIGURABLE BY CONTROL DEVICE
CN 113906388 B	部署有用于自动化控制程序的独立应用程序容器的监督设备
EP 4 376 040 B1	MEMBRANE KEYBOARD FOR A PROTECTIVE DEVICE IN THE AREA OF ELECTRIC ENERGY TRANSMISSION AND DISTRIBUTION
EP 4 205 011 B1	METHOD OF BOUNDING SPATIAL DATA
US 12,124,235 B2	Self-learning routine for checking compatibility
CN 114906607 B	传送式码垛机的控制方法及传送式码垛机
EP 4 075 213 B1	METHOD AND SYSTEM FOR GENERATING ENGINEERING PROGRAMS FOR AN INDUSTRIAL DOMAIN
US 12,355,363 B2	Energy converter for energy conversion of electrical energy into thermal energy
CN 115146795 B	数据的新奇检测方法及装置
US 11,824,458 B2	DC-to-dC converter and operation thereof
US 12,696,762 B2	Power semiconductor module comprising at least one power semiconductor element
EP 4 365 744 B1	SOFTWARE SECURITY DEFECT PREDICTION METHOD AND DEVICE, AND COMPUTER READABLE MEDIUM
EP 4 139 757 B1	METHOD AND ASSEMBLY FOR REPAIRING A WORKPIECE
US 12,619,952 B2	Method and system for providing recommendations for bill of materials revision
US 11,958,374 B2	Standalone or networked electric vehicle supply equipment (EVSE) to detect and stop arcing before it becomes dangerous
US 12,675,613 B2	Method and system for enhancing real-time grid security of power system
EP 4 194 867 B1	ELECTRICAL SWITCHING DEVICE FOR HIGH VOLTAGE WITH INTEGRATED FAULT DETECTOR, METHOD FOR DETECTING A FAULT IN THE HIGH VOLTAGE SWITCHING DEVICE AND USE OF THE HIGH VOLTAGE SWITCHING DEVICE
GB 2589594 B	Detecting anomalous latent communications in an integrated circuit chip
US 12,027,841 B2	Circuit breaker distribution system configured to provide selective coordination
EP 3 625 629 B1	DEVICE AND METHOD FOR DETERMINING THE CONDITION OF A SPINDLE OF A MACHINE TOOL
EP 3 752 385 B1	SETTING A COMMUNICATION PARAMETER OF A COMMUNICATION MODULE OF A CHARGING STATION
DE 10 2024 207 512 B3	Schaltanlage mit einer Verriegelungseinrichtung
DE 10 2020 212 573 B4	Brandmeldezentrale, Anordnung für eine Gebäudeautomatisierung sowie Verfahren
EP 4 281 890 B1	METHOD FOR DETERMINING THE INTEGRITY OF DATA PROCESSING, DEVICE, DATA PROCESSING SYSTEM AND SYSTEM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115516385 B	用于提供旋转电动机器的仿真模型的方法和系统
EP 4 348 987 B1	A METHOD OF COMMUNICATING WITH A MICROSERVICE IN AN INDUSTRIAL FACILITY
CN 112612201 B	自动化系统、创建自动化系统的方法和计算机可读介质
US 12,498,681 B2	Method for configuring a control agent for a technical system, and control device
US 12,162,146 B2	Method and system for facilitating a concurrent simulation of multiple robotic tasks
IN 507815 B	A BUSHING ARRANGEMENT OF A SWITCHGEAR ASSEMBLY
US 12,693,649 B2	Identification of model parameters for a manufacturing machine, and use thereof for determining optimised trajectories
US 12,395,355 B2	Method for securely replacing a first manufacturer certificate already introduced into a device
CN 113165180 B	关节臂机器人
EP 3 667 529 B1	METHOD AND DEVICE FOR AUTHENTICATING AN FPGA CONFIGURATION
EP 3 980 312 B1	SINGLE-AXLE DRIVE AND RAIL VEHICLE
EP 3 804 180 B1	DEVICE AND METHOD FOR DETERMINING A TIME OFFSET BETWEEN TWO TIME BASES
EP 4 235 317 B1	METHOD FOR CONTROLLING A MACHINE BY MEANS OF A LEARNING BASED CONTROL AGENT AND CONTROL DEVICE
EP 3 856 606 B1	METHOD FOR ANALYSING CONDITIONS OF TECHNICAL COMPONENTS
EP 4 344 518 B1	SERVICE LIFE-OPTIMIZED SEMICONDUCTOR COOLING
EP 4 449 733 B1	TRANSMISSION OF PRE-PROCESSED SENSOR DATA WITH RESPECT TO DATA QUALITY
CN 114326612 B	共线生产中的配方控制方法、系统及存储介质
US 12,481,910 B2	Method and system for predicting a motion trajectory of a robot moving between a given pair of robotic locations
EP 3 736 649 B1	METHOD FOR ESTIMATING THE REMAINING USEFUL LIFE OF AT LEAST ONE ELECTROMECHANICAL COMPONENT
EP 4 120 310 B1	REAL TIME MONITORING AND PARAMETRIC MODIFICATIONS FOR ELECTRONIC CIRCUIT BREAKERS THROUGH A REMOTE DEVICE
US 11,956,577 B2	Managing data transmission from a plurality of telemetry devices onboard trains
US 11,797,044 B2	Clock domain translation for non-synchronized sensors
US 11,885,342 B1	Controller and method for adaptive speed control of a fan array
US 12,358,214 B2	Monitoring and process control of the additive manufacture of a workpiece
EP 3 899 699 B1	METHOD AND SYSTEM FOR VIEWING VIRTUAL ELEMENTS
EP 4 414 239 B1	INTERFACE DEVICE, VEHICLE WITH INTERFACE DEVICE AND METHOD TO INTEGRATE A VEHICLE COMPONENT INTO A VEHICLE WITH INTERFACE DEVICE
EP 3 984 856 B1	METHOD FOR DETECTING THE VEHICLE CATEGORY OF A RAILWAY VEHICLE AND DEVICE SUITABLE FOR USE OF THE METHOD
DE 10 2022 201 545 B4	Sitzeinheit und Fahrzeug mit Sitzeinheit
US 12,363,854 B2	Solid-state circuit breaker with a ventilation system that uses multi-layered covers to ventilate for cooling
AU 2025202192 B2	Devices and methods for controlling a railroad crossing gate mechanism
US 12,226,902 B2	Method and manipulation system for manipulation of an object by a robot
US 11,884,338 B2	Self-balancing driverless transport vehicle
EP 4 201 782 B1	ARRANGEMENT FOR DRIVING A LOCOMOTIVE HAVING DIFFERENT ENERGY PROVISION SYSTEMS
US 11,983,087 B2	Detecting anomalous latent communications in an integrated circuit chip
US 11,961,576 B2	Method and apparatus for processing memory repair information
US 12,523,973 B2	Induced voltage-based control of a sensor network
CN 116993638 B	单线图的提取方法、电子设备、介质和计算程序产品
US 12,688,984 B2	Circuit breaker
US 12,328,183 B2	Method for avoiding function disablements for intelligent electronic units
KR 102886275 B1	배터리용 현탁액의 산업 규모 생산을 위한 방법 및 장치
EP 4 474 776 B1	DIAGNOSTIC METHOD FOR A FLOW METER WITH EFFECTIVE PRESSURE LINE WITH VIBRATION MEASUREMENT
EP 3 873 051 B1	METHOD FOR VALIDATION OF A DIGITAL CERTIFICATE
US 12,583,101 B2	Method for operating a modular robot, modular robot, collision avoidance system, and computer program product
CN 115885154 B	功能安全高速故障安全计数器模块
US 11,942,283 B2	Fixing module for a control and signaling device having an integrated grounding function
US 12,117,787 B2	Method and control system for controlling an execution of transactions
US 12,287,613 B2	Method and assembly for managing automation programs for industrial automation platforms
EP 3 698 390 B1	OVERPRESSURE-RESISTANT VACUUM INTERRUPTER TUBE
CN 116668230 B	云主机及多路比较方法
US 12,640,562 B2	Method and central computer arrangement for predicting a grid state, and computer program product
CN 114781782 B	产线工艺程序的生成方法、装置和计算机可读介质

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 968 038 B1	METHOD AND DEVICE FOR DETECTING A FAULT LOCATION IN AN ELECTRICAL ENERGY SUPPLY NETWORK
EP 4 244 958 B1	METHOD FOR SHAPING AND INTRODUCING COILS INTO A STATOR OF AN ELECTRIC ROTATING MACHINE
US 11,892,474 B2	Universal measurement input for connecting a small signal transformer and electrical device with such a measurement input
EP 4 126 626 B1	DOUBLE-LEAF DOOR DEVICE FOR A VEHICLE
US 12,694,139 B2	Method and system for activating a PCB analysis utilizing manufacturing capability data
CN 112789777 B	保护电路
EP 3 940 640 B1	A METHOD AND A DATA PROCESSING SYSTEM FOR ALIGNING A FIRST PANORAMIC IMAGE AND A SECOND PANORAMIC IMAGE IN A NAVIGATION PROCEDURE
EP 3 618 354 B1	INDUSTRIAL CONTROL SYSTEM AND NETWORK SECURITY MONITORING METHOD THEREFOR
CN 111936976 B	用于引导测试用例生成的启用人工智能的输出空间探索
CN 112789702 B	低压断路器
US 12,656,760 B2	Method and control system for a technical plant using a trend curve diagram
US 11,851,096 B2	Anomaly detection using machine learning
DE 10 2021 203 037 B4	Anordnung zum Erkennen eines Kurzschlusses in einer Schaltanlage
EP 4 327 299 B1	TRANSFORMATION FOR COVARIATE SHIFT OF GRASP NEURAL NETWORKS
EP 4 002 029 B1	METHOD AND SYSTEM FOR WIRELESS COMMUNICATION OF DATA IN A PRODUCTION AREA
EP 4 371 141 B1	SALES UNIT WITH A DEVICE FOR TRIGGERING AN ELECTRICAL SWITCH
DE 10 2022 210 690 B4	Verfahren zum Abschalten von Strömen mit adaptiven Schaltzeiten und Mittel- und/oder Hochspannungsschaltanlage zum Abschalten von Strömen mit adaptiven Schaltzeiten
CN 113454631 B	基于计算机辅助设计的嵌入式传感器模拟与分析
CN 112204887 B	用于经由单向通信单元以纠错的方式传输数据记录的方法和系统
EP 3 914 499 B1	METHOD FOR OPERATING A DRIVER ASSISTANCE SYSTEM FOR A TRACK-BOUND VEHICLE
CN 111328401 B	用于在计算单元中进行机器学习的方法和设备
EP 3 612 430 B1	METHOD FOR OPERATING A TRACK-BOUND TRAFFIC SYSTEM AND APPARATUS
EP 4 111 481 B1	METHOD FOR THE TWO-STAGE FORMATION OF CONTACTS OF A VACUUM SWITCHING DEVICE
EP 3 879 549 B1	METHOD AND DEVICE FOR DETERMINING CLOSING TIME OF CIRCUIT BREAKER, AND COMPUTER-READABLE MEDIUM
EP 3 776 183 B1	METHOD AND PLATFORM FOR DEPLOYMENT OF AN INDUSTRIAL APPLICATION ON AN EDGE COMPUTING DEVICE OF A MACHINE TOOL
DE 10 2023 208 902 B3	Elektrischer Schalter mit einer Vorrichtung zum Verriegeln
EP 3 655 784 B1	CURRENT SENSOR ARRANGEMENT
EP 4 367 701 B1	CIRCUIT BREAKER
CN 111213141 B	用于将机器与多个应用耦合的设备和方法
CN 113678336 B	控制固态断路器的方法、装置和固态断路器
EP 4 466 547 B1	SENSOR SYSTEM FOR AN ELECTRIC MACHINE
US 12,627,154 B2	Power management systems and methods
US 12,214,812 B2	Vehicle
EP 3 625 105 B1	METHOD FOR DETERMINING A DIRECTION OF TRAVEL AND/OR POSITION AND DEVICE FOR A VEHICLE
CN 116034407 B	使用公共通信和电力的网络配电
US 12,621,368 B2	Method for configuring a communication network for the cyclical transmission of messages
EP 4 024 259 B1	LINEARIZATION PROCESSING METHOD AND DEVICE FOR NONLINEAR MODEL, AND STORAGE MEDIUM
CN 115668074 B	生产过程的建模和仿真方法及装置
CN 113632546 B	状态监控系统和方法
KR 102789696 B1	재료층, 전기 기계용 재료층 스택 및 재료층을 생산하는 방법
US 12,004,316 B2	Flexibly configurable converter units
CN 117926620 B	阀门开度控制方法、装置、控制器及造纸机
US 12,487,570 B2	Planning a technical process having hierarchically structured tasks and parallelization options
US 12,388,389 B2	Method and system for controlling a dynamoelectric machine
US 12,409,522 B2	Device and method for machining a workpiece
EP 3 903 114 B1	MULTI-CAPTURE AT-SPEED SCAN TEST BASED ON A SLOW CLOCK SIGNAL
DE 10 2023 207 762 B4	Verfahren zum Ermitteln einer unharmonischen Störfrequenz einer Asynchronmaschine, Steuer- und/oder Diagnoseeinrichtung einer Asynchronmaschine sowie Computerprogrammprodukt und computerlesbares Medium
CN 114698925 B	牙刷刷毛孔分布图的生成方法及显示装置
CN 116113835 B	一种电能质量监测设备的部署方法和装置

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,984,792 B2	Geared motor unit
IN 458892 B	AUTOMATION SYSTEM AND METHOD FOR OPERATION
CN 118020282 B	用于连接多个工业设备的网络设备
EP 4 006 674 B1	METHOD AND SYSTEM FOR MAINTAINING A PLANT
CN 113678129 B	授权对计算机化系统中的对象的访问的方法、计算机程序产品和现场设备
CN 116096531 B	顶持力确定方法、装置及存储介质
EP 3 745 146 B1	METHOD, DEVICE AND SYSTEM FOR DETERMINING A CHARACTERISTIC OF A POWER TRANSMISSION LINE
IN 464144 B	COMPUTER-IMPLEMENTED METHOD FOR ERROR-CORRECTION-ENCODING AND ENCRYPTING OF A FILE
US 12,547,614 B2	Computer systems and methods for a guided query
US 12,549,517 B2	Communication system and method for securely transmitting time-critical data within the communication system
US 12,217,139 B2	Transforming a trained artificial intelligence model into a trustworthy artificial intelligence model
IN 502858 B	A METHOD AND A DEVICE FOR POWER SUPPLY SWITCHOVER IN A POWER SYSTEM
KR 102855412 B1	공용 통신 및 전력을 사용한 네트워크 분배
IN 498878 B	ANTI-CLIMBING DEVICE
US 11,882,447 B2	Computer-implemented method and network access server for connecting a network component to a network with an extended network access identifier
US 12,252,145 B2	Sensor data generation for controlling an autonomous vehicle
CN 115066728 B	具有自动化多步参考微调的存储器内建自测试
BR 112024005159 B1	DISPOSITIVO DE REDE, E, MÉTODO PARA CONECTAR UM NOVO DISPOSITIVO INDUSTRIAL À REDE DE COMUNICAÇÃO SEM FIO
EP 4 519 042 B1	MANUFACTURE OF A COOLING BODY
CN 112204526 B	用于配置自动化系统的方法
EP 4 066 353 B1	METHOD FOR IMPREGNATING, REINFORCING OR ELECTRICALLY INSULATING A BODY CARRYING SINGLE-LAYER OR MULTI-LAYER WINDINGS
EP 4 078 304 B1	REDUCTION OF FRICTION WITHIN A MACHINE TOOL
CN 113950429 B	用于轨道交通工具的集电弓
CN 115666823 B	从增材制造的部件分离多余材料的方法和装置
US 12,361,260 B2	Determining at least one node
EP 4 384 835 B1	METHOD FOR MONITORING A MACHINE, COMPUTER PROGRAM PRODUCT AND ARRANGEMENT
EP 4 113 392 B1	METHOD FOR TESTING THE RELIABILITY OF AN AI-BASED OBJECT DETECTION SYSTEM
CN 116601977 B	用于确定工业设施中的用户设备的位置的方法
EP 3 814 983 B1	VISUALIZATION DEVICE AND METHOD FOR VISUALIZING THE INTERIOR OR EXTERIOR OF A VEHICLE
EP 4 288 886 B1	PROVISION OF DATA TO BE PROTECTED IN A SECURE EXECUTION ENVIRONMENT OF A DATA PROCESSING SYSTEM
JP 7497395 B2	産業用オートメーション装置用の更新されたアプリケーションをコミッショニングする方法および装置
US 12,073,303 B2	Method for producing a test data record, method for testing, method for operating a system, apparatus, control system, computer program product, computer-readable medium, production and use
EP 4 218 126 B1	DC/DC CONVERTER SYSTEM AND CONTROL METHOD FOR FULL-BRIDGE DC/DC CONVERTER
EP 4 097 792 B1	DEVICE AND METHOD FOR MANAGING COMMUNICATIONS
US 12,159,390 B2	Image-based defect detections in additive manufacturing
EP 4 042 556 B1	METHOD FOR CONTROLLING THE CURRENT OUTPUT OF A BATTERY
EP 4 305 541 B1	TEST GENERATION FOR STRUCTURALLY SIMILAR CIRCUITS
CN 114630734 B	具有专用硬件加速的支持机器学习的视觉伺服
CN 115550096 B	用于电流隔离至少一个设备的装置和连接现场设备的开关
US 12,562,323 B2	Circuit breaker device
US 12,614,416 B2	Method and apparatus for diagnosing and monitoring vehicles, vehicle components and routes
EP 4 476 115 B1	RETROFITTABLE AIR CURTAIN FOR A RAIL VEHICLE
BR 102022005105 B1	MÓDULO DE POTÊNCIA
US 12,382,590 B2	Mount for a circuit board
EP 3 868 016 B1	OPERATION OF SWITCHING ELEMENTS OF A MULTI-LEVEL ENERGY CONVERTER
US 12,345,693 B2	Computer-assisted method for generating training data for a neural network for predicting a concentration of pollutants at a measuring station
EP 3 788 389 B1	REDUNDANT CURRENT-MEASURING ARRANGEMENT WITH DETECTION OF INTERRUPTIONS OF AN ELECTRIC CIRCUIT
CN 115916573 B	在弱能量供应网络处对交通工具的能量存储器充电
EP 4 292 028 B1	SYSTEMS AND METHODS FOR IMPROVING A DESIGN OF ARTICLE USING EXPERT EMULATION
EP 4 469 987 B1	SYSTEM AND METHOD FOR TESTING A FIRE SAFETY SYSTEM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 113228574 B	计算资源调度方法、调度器、物联网系统和计算机可读介质
DE 11 2018 002 255 B4	Vakuumschalter
CN 113950618 B	用于确定轴承的剩余寿命的系统、装置和方法
EP 3 830 769 B1	METHOD AND APPARATUS FOR COMPUTER-IMPLEMENTED OPTIMIZATION OF TOOL TRANSPORTS FOR A TOOL MAGAZINE WITH MULTIPLE TOOL SLOTS
CN 114450864 B	用于负载电阻的保护装置
IN 508915 B	INDUSTRIAL CONTROL SYSTEM MONITORING METHOD, DEVICE AND SYSTEM, AND COMPUTER-READABLE MEDIUM
DE 10 2017 221 071 B4	Elektrische Kontaktierungsschnittstelle mit einem geringen und stabilen elektrischen Übergangswiderstand
CN 114669791 B	剪切控制系统、方法及剪板设备
EP 4 086 492 B1	CONTROL VALVE
EP 4 356 455 B1	MANUFACTURING METHOD AND APPARATUS FOR BATTERY STORAGE
US 12,528,525 B2	Method for monitoring a danger area and monitoring device
CN 116458132 B	借助流程控制环境提供时间关键的服务的方法和系统
IN 540731 B	SENSOR DEVICE FOR A RAILWAY SYSTEM
US 11,797,283 B2	Application program development and deployment method and apparatus, and computer-readable medium
CN 113454475 B	用于自动检验开关器件的方法和设备
CN 115480521 B	用于识别技术设施的受限的操作和监控的方法、操作系统和监控系统和过程控制系统
CN 114341823 B	用于控制多轴运动机器的方法、装置和存储介质
US 12,335,266 B2	Method for granting access to objects in a computerized system, computer program product, and field device
EP 4 268 071 B1	METHOD FOR THE CONFIGURATION OF CONTROL SOFTWARE IN A RAIL VEHICLE
EP 4 094 177 B1	SYSTEM AND METHOD FOR FATIGUE RESPONSE PREDICTION
EP 3 818 473 B1	SYSTEM AND METHOD FOR AUTOMATED VISUAL INSPECTION
US 12,454,296 B2	Method and apparatus with an axle counter for operating a railroad crossing, computer program product and delivery apparatus for the computer program product
CN 114207382 B	信令设备
EP 4 323 867 B1	INTELLIGENT DEVICE EXTENSION FOR BUILDING SOFTWARE APPLICATIONS
EP 3 771 155 B1	GATEWAY AND METHOD FOR CONNECTING A BUILDING AUTOMATION NETWORK TO THE INTERNET
CN 116670946 B	用于驱动单元的连接器
US 12,162,525 B2	Method and system for regulating guided vehicle headways
EP 4 193 313 B1	MONITORING DEVICE AND METHOD FOR SEGMENTING DIFFERENT TIMES SERIES OF SENSOR DATA POINTS
IN 592852 B	SYSTEM AND METHOD FOR COMMISSIONING FRESH AIR INTAKE CONTROL
US 12,391,522 B2	Operating method for a loading system and automation system for controlling the loading system
US 12,618,753 B2	Measurement apparatus for measuring air flowing inside pipeline
US 12,541,729 B2	Method and system for dynamically recommending commands for performing a product data management operation
EP 3 849 095 B1	SYSTEM AND MODULES FOR COMMUNICATION
EP 4 620 158 B1	METHOD FOR OPERATING AN AUTOMATION DEVICE, SYSTEM AND CONTROL PROGRAM
CN 115298492 B	用于控制HVAC系统的计算机化设备和计算机实现的方法
EP 4 328 781 B1	METHOD AND SYSTEM FOR IMPROVING QUALITY AND ACCURACY OF DATA OF PLURALITY OF DIGITAL TWINS INTERACTING IN A COMPUTER SIMULATED COLLABORATIVE ENVIRONMENT OVER A DISTRIBUTED NETWORK
CN 113826051 B	生成实体系统零件之间的交互的数字孪生
CN 116853919 B	用于控制和配置建筑物中的居住者疏散操作的系统
US 11,940,782 B2	Product performance prediction modeling to predict final product performance in case of device exception
CN 115917462 B	提供用于控制生产环境中的货物运输的运输数据的方法和控制单元以及生产环境
US 12,615,458 B2	Safety communication method, communication apparatus, safety communication system and control system
EP 3 938 855 B1	METHOD AND DEVICE FOR CALLING PROGRAM MODULE IN PLC LADDER PROGRAMMING ENVIRONMENT
US 12,513,166 B2	Method and system for automated analysis of industrial cybersecurity events
EP 4 328 687 B1	METHOD AND SYSTEM FOR IDENTIFYING A ROOT CAUSE OF AN EVENT
US 11,942,290 B2	Vacuum interrupter
CN 115224908 B	功率模块
CN 110488180 B	电子部件的测试设备
US 12,625,491 B2	Method and system for digital plant system model creation and simulation and storage medium
EP 4 255 004 B1	METHOD AND SYSTEM FOR ONBOARDING FOR AN IOT DEVICE
EP 3 659 306 B1	SCHEDULING OF DATA TRAFFIC

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
IN 488209 B	SYSTEM, METHOD AND CONTROL UNIT FOR CONTROLLING OPERATION OF A TECHNICAL SYSTEM
EP 4 274 041 B1	MODULAR INSULATING MATERIAL HOUSING AND MULTIPOLE MODULAR SERIES INSTALLATION DEVICE
EP 4 104 284 B1	POWER CONVERTER
EP 4 300 220 B1	SAFETY COMMUNICATION METHOD AND COMMUNICATION DEVICE
US 11,825,320 B2	Apparatus, system and method for testing radio equipment
EP 3 385 974 B1	RESIDUAL CURRENT OPERATED CIRCUIT BREAKER
CN 109991598 B	阵列调频雷达实时断面测量装置和方法
US 11,775,911 B2	Method and apparatus for providing predictions of key performance indicators of a complex manufacturing system
EP 3 908 425 B1	DAMPING OF VIBRATIONS IN A MACHINE TOOL WITH MULTIPLE VIBRATION DETECTION
EP 4 150 421 B1	SYSTEM, DEVICE AND METHOD OF DETECTING ABNORMAL DATAPOINTS
US 11,837,947 B2	Self-commutated inverter and operation of same
US 12,434,875 B2	System and method for automatically orienting product containers
CN 118900817 B	用于具有待提升或降低的对象的升降应用的负载补偿装置
CN 113490920 B	一种评估代码设计质量的方法、装置和系统
US 11,853,903 B2	SGCNN: structural graph convolutional neural network
CN 113589076 B	飞轮储能中电机负载的模拟方法和计算机可读介质
US 12,087,292 B2	Method and system for providing a speech-based service, in particular for the control of room control elements in buildings
US 12,169,674 B2	Training of machine learning-based inverse lithography technology for mask synthesis with synthetic pattern generation
US 12,611,616 B2	System and method for managing crystallization process in a process control plant
EP 4 139 820 B1	BOOT DEVICE FOR A COMPUTER ELEMENT AND METHOD FOR BOOTING A COMPUTER ELEMENT
JP 7467776 B2	少なくとも１つの空隙部を有する材料層を製造する方法
DE 10 2024 201 353 B3	Verbesserte Ein- oder Anbauteile für Mittelspannungsschaltanlagen
EP 4 191 438 B1	SOFTWARE INFORMATION ORGANIZATION METHOD AND DEVICE, AND COMPUTER-READABLE MEDIUM
US 12,237,125 B2	Method for coordinating protective devices in a distribution grid
DE 10 2023 005 489 B4	Virtual- Reality-unterstütztes Diagnoseverfahren für eine Anlage mit computerbasierter Auralisierung
US 12,184,269 B2	Electronic switch with surge protector
DE 10 2020 206 469 B4	Vakuumschaltröhre mit verbessertem Bedampfungsschutz
CN 115606223 B	检测工业设施中干扰源的方法
US 12,537,382 B2	Control design for a photovoltaic system in grid-forming operation for power grid support
AT 528314 B1	Pneumatische Antriebsanordnung, Stromabnehmer und Fahrzeug
CN 115885226 B	用于对自动导引车(AGV)系统进行仿真的方法和装置
US 12,470,171 B2	Method, computer-implemented tool and power plant control device for detecting power production degradation of solar power plants and solar power plant system
EP 4 485 851 B1	METHOD FOR COMMUNICATING IN AN INDUSTRIAL CONTROL SYSTEM AND INDUSTRIAL CONTROL SYSTEM
CN 116157837 B	用于机器人的标定方法和装置
US 11,954,631 B2	Method of and system for enacting a business process in an event-driven environment
EP 3 944 434 B1	FASTENING EQUIPMENT AND ROW INSTALLATION DEVICE
EP 4 486 628 B1	TRAILABLE POINTS
US 12,129,892 B2	Bearing bush for a rotating shaft, bearing shield, electric motor and method for manufacturing a damping element
EP 4 485 099 B1	CONTROL SYSTEM FOR A TECHNICAL INSTALLATION AND OPERATING METHOD
CN 116319156 B	工业网络系统
CN 116324833 B	确定污染源的方法、装置和计算机可读存储介质
CN 112513847 B	用于运行计算设备的方法
IN 491014 B	METHOD OF IDENTIFYING AND DISPLAYING OPERATOR ACCESSES TO PROCESS OBJECTS AND OPERATOR SYSTEM
CN 115485178 B	用于在轨道车辆上传递纵向力的装置
US 12,333,224 B2	Systems and methods for overlaying and integrating computer aided design (CAD) drawings with fluid models
EP 3 906 495 B1	DIE YIELD ASSESSMENT BASED ON PATTERN-FAILURE RATE SIMULATION
EP 3 640 767 B1	METHOD FOR DETERMINING AT LEAST ONE AREA IN AT LEAST ONE INPUT MODEL FOR AT LEAST ONE ELEMENT TO BE PLACED
EP 4 335 716 B1	RAILWAY VEHICLE
EP 4 463 786 B1	METHOD FOR SECURELY OPERATING A SOFTWARE COMPONENT
US 12,077,199 B2	Monitoring of barrier gates at level crossings
DE 10 2023 205 186 B3	Leistungsschalter

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,298,258 B2	Systems and methods for automated x-ray inspection
US 12,633,469 B2	Contact for a vacuum interrupter and production method for such a contact
CN 113966264 B	用于基于接触定位在通过机器人操纵时可移动的对象的方法、计算机程序产品和机器人控制装置以及机器人
EP 4 612 625 B1	OPTIMIZATION OF A PRODUCTION SYSTEM BASED ON PRODUCTION PLAN
CN 115210542 B	容器秤或平台秤
EP 4 160 390 B1	METHOD AND ASSEMBLY FOR COMMISSIONING AN UPDATED APPLICATION FOR AN INDUSTRIAL AUTOMATION DEVICE
EP 4 165 670 B1	CIRCUIT BREAKER, REMOVABLE DISPLAY, AND ELECTRONIC TRIGGER UNIT FOR A CIRCUIT BREAKER
BR 112020000804 B1	MÉTODO E DISPOSITIVO PARA LOCALIZAR FALHAS AO LONGO DE UMA CADEIA DE FORNECIMENTO DE ENERGIA, E, DISPOSITIVO DE PROTEÇÃO E CONTROLE PARA SISTEMAS DE CORRENTE CC
EP 4 248 282 B1	CONFIGURATION OF A BUILDING
CN 115804257 B	印刷电路板组件的检查及生产
US 12,570,331 B2	Vehicle with air outlet opening
EP 3 625 880 B1	TRANSMISSION MOTOR UNIT
DE 10 2025 101 139 B3	Gaszuführungseinrichtung
IL 297685 B1	תויחטב תויצקנופ עוציבל תוחיטב תנווכומ תכרעמו הטיש
US 11,988,251 B2	Elastic bearing
EP 3 729 611 B1	REEL MOTOR WITH CLOSED COOLING CIRCUIT
DE 10 2018 204 673 B4	Verfahren zur Herstellung eines Magnetjochs
EP 4 435 541 B1	WORKFLOW FOR EFFICIENT PARAMETERIZATION OF A NUMERICAL CONTROLLER
JP 7381752 B2	ロックステップで動作するプロセッサのモニタリング
AT 528002 B1	Stromversorgungsvorrichtung, Stromversorgungseinrichtung und Fahrzeug
EP 3 659 322 B1	SOFTWARE DISTRIBUTION METHOD AND SOFTWARE DISTRIBUTION SYSTEM FOR A TRACK-GUIDED VEHICLE
CN 114127708 B	用于将工业自动化装置的数据提供至外部装置的方法和装置
EP 3 696 694 B1	3-DIMENSIONAL (3D) CORE DESIGN FOR ADDITIVE MANUFACTURING
EP 4 338 018 B1	METHOD FOR OPERATING A MACHINE TOOL AND/OR PRODUCTION MACHINE
CN 113574398 B	用于监视铁路轨道设备的道岔的方法
EP 4 466 173 B1	VEHICLE HAVING A FUEL CELL SYSTEM AND A TREATMENT DEVICE FOR TREATING THE PROCESS WATER
US 12,079,886 B2	System and method for manufacturing a product in a distributed environment
CN 116745733 B	用于在工业设施中为增强现实设备生成地图的方法
AT 525989 B1	Schienenfahrzeug mit einer Luftfederung
EP 4 075 060 B1	AIR-FUEL GAS MIXER AND COMBUSTION SYSTEM
CN 110717198 B	运行针对设备的通过软件来构建的处理单元的装置和方法
EP 4 702 410 B1	VIRTUAL-REALITY-SUPPORTED DIAGNOSTIC METHOD FOR A FACILITY WITH COMPUTER-BASED AURALISATION
EP 3 639 372 B1	METHOD, FIELD DEVICE AND NETWORK FOR DATA ACQUISITION
CN 114175433 B	用于直流电网的过电流保护设备
EP 3 889 624 B1	PROTECTION AGAINST EXCITATION AT STANDSTILL OF THE GENERATOR
CN 111108451 B	工业控制系统
CN 115085961 B	在自动化设施的通信网络中对设备的认证
US 12,578,714 B2	Gateway and method for transforming a data model of a manufacturing process equipment
EP 4 614 041 B1	VALVE FOR A COOLING SYSTEM
EP 4 310 521 B1	METHOD AND SAFETY DEVICE FOR LOCATING A FAULT
CN 113225367 B	主机和客户端之间基于包通信的自动化网络及其运行方法
EP 3 831 032 B1	METHOD AND DEVICE FOR CONFIGURING AN ACCESS CONTROL SYSTEM
US 12,311,379 B2	Method and arrangement for industrial scale production of a suspension for a battery
US 12,030,535 B2	Railway automation network and method for transmitting messages in a railway automation network
EP 4 487 184 B1	METHOD FOR OPERATING A MACHINE TOOL, COMPUTER PROGRAM PRODUCT, CONTROL UNIT, MACHINE TOOL, SIMULATION PROGRAM PRODUCT AND USE OF A CONTROL UNIT
CN 116057894 B	用于管理安全组的密钥的方法
CN 113748476 B	弹簧系统、耦连器、驱动系统和中压开关设施
EP 3 639 212 B1	DECENTRALIZED PLANNING, SCHEDULING AND CONTROL OF MULTI-AGENT FLOW CONTROL SYSTEM
DE 10 2018 202 259 B4	Ladestation zum Laden von Elektrofahrzeugen mit verteilter Energiemessung sowie Verfahren
US 12,482,092 B2	Quality inspection method and quality inspection arrangement
EP 4 281 836 B1	METHOD AND APPARATUS FOR CLASSFICATION AND PREDICTION OF HEALTH OF A PHYSICAL SYSTEM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 176 422 B1	METHOD FOR AUTOMATIC TESTING OF A FIRE ALARM SYSTEM
US 12,540,982 B2	Methods and systems for determining a capacity loss of a battery storage device
US 12,335,758 B2	Method and device for testing a base station
US 12,032,876 B2	Device and method for simulating a controlled machine or installation
MX 423340 B	GESTIÓN DE PROBLEMAS DE ALARMAS PARA UN ENTORNO DE GESTIÓN DE EDIFICIOS
EP 4 435 322 B1	CONTROL OF A COMBUSTION APPARATUS
DE 10 2022 208 368 B4	Verbinder für einen Leistungsschalter und ein nachgelagertes Schütz, Abzweig mit solch einem Verbinder und Anordnung mit solch einem Abzweig
US 12,670,030 B2	Computing networking system for container orchestration and method thereof
EP 4 067 202 B1	METHOD AND ASSEMBLY FOR LOCATING A TRACK-BOUND VEHICLE IN A ROUTE NETWORK FOLLOWING START-UP OF THE VEHICLE
US 11,822,646 B2	Generating an automated security analysis for an installation
EP 3 978 281 B1	VEHICLE WITH CATALYTIC BURNER FOR AIR CONDITIONING A PASSENGER COMPARTMENT
US 12,072,115 B2	Controller and method for managing a flow unit
EP 4 229 346 B1	HEAT PIPE COOLER FOR PULSATING OPERATION AND METHOD FOR PRODUCING SUCH A HEAT PIPE COOLER
CN 117203941 B	用于分析和控制网络流量的系统和方法
CN 113471032 B	机电的紧凑式保护开关设备
US 11,957,943 B2	Blocking apparatus for a fire damper, blocking apparatus system and method for blocking a drive direction
IN 576731 B	METHOD AND SYSTEMS FOR SIMULATING DRIVE DEVICES
EP 4 287 411 B1	SCREW TERMINAL OF THE TYPE LIFT CLAMP AND INSTALLATION DEVICE
EP 3 782 275 B1	DC-DC CONVERTER AND USE OF SAME
CN 113423973 B	具有作为复位弹簧的卷绕片簧的致动驱动装置
EP 4 046 004 B1	GENERATING A 3D MODEL OF A PLANT LAYOUT
CN 114730674 B	检测机电开关元件的开关状态
DE 10 2024 204 966 B3	Betriebsverfahren für ein Feldgerät, Computerprogrammprodukt, Feldgerät, übergeordnete Steuereinheit und Automatisierungssystem
EP 4 204 912 B1	GENERATING A DIGITAL TWIN, METHOD, SYSTEM, COMPUTER PROGRAM PRODUCT
US 12,145,638 B2	Method for identifying and verifying control software of a rail vehicle
CN 114545871 B	用于与一个或多个现场设备通信的方法
EP 4 237 308 B1	ASSEMBLY FOR TRANSMITTING LONGITUDINAL FORCES IN A RAIL VEHICLE
US 12,567,743 B2	Integral voltage control of a distribution feeder to avoid voltage violations
CN 115311834 B	安全性设备检查
EP 4 126 629 B1	RUNNING GEAR FOR A RAIL VEHICLE
US 12,054,185 B2	System and method for monitoring a railroad grade crossing
CN 111356959 B	用于计算机辅助地控制技术系统的方法
US 12,108,262 B2	Methods of communicating between a radio unit and a distributed unit
KR 102984023 B1	마이크로서비스 편성 방법 및 장치, 전자 디바이스, 및 판독가능 매체
EP 3 837 565 B1	METHOD, APPARATUS AND DEVICE FOR EVALUATING THE STATE OF A DISTRIBUTION TRANSFORMER, AND A MEDIUM AND A PROGRAM
CN 111819760 B	高压或中压装备的监控
CN 111699105 B	用于利用分布式能量测量为电动车辆充电的充电站及方法
CN 111707160 B	检测装置及具有检测装置的车辆合装系统
EP 4 068 551 B1	SYSTEM AND METHOD FOR PREDICTING FAILURE IN A POWER SYSTEM IN REAL-TIME
CN 113826324 B	直流电压开关
US 12,321,160 B2	Online multi-force-adaption during machining
US 12,248,297 B2	Method and apparatus for computer aided optimization of an occupancy of magazine slots by tools
EP 4 170 248 B1	DETECTION OF WINDOWS LEFT OPENED
EP 3 720 039 B1	METHOD FOR CONFIGURING A SECURITY MODULE COMPRISING AT LEAST ONE DERIVED KEY
US 12,405,134 B2	Electronic seal label apparatus, electric motor assembly and electronic seal label verification method
EP 4 078 626 B1	BRAKING RESISTANCE FOR A VEHICLE
US 11,820,024 B2	Coordinate system calibration method, device, and computer readable medium
IL 269899 B1	תילאוויו הקידב ךילהתב תושמשמה תונומתב הזוזת
US 12,429,861 B2	Commissioning/configuration method, tool and computer-readable storage media for an industrial device

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
DE 10 2019 203 823 B4	Schalteinrichtung mit Überspannungsschutz und Trennereigenschaften und Verfahren zum Schutz einer Schalteinrichtung gegen Überspannungen
US 12,070,866 B2	Articulated-arm robot
EP 4 133 565 B1	FILTER DEVICE
CN 114556247 B	用于确定产品质量的方法和设备
EP 3 934 960 B1	DEVICE AND METHOD FOR DETERMINING DISTANCES BETWEEN THE VEHICLE BODIES AND CHASSIS OF VEHICLES
CN 116727847 B	激光焊接装置的焊接路径生成方法
EP 4 312 097 B1	INDUSTRIAL CONTROL DEVICE, INDUSTRIAL CONTROL SYSTEM AND METHOD OF OPERATING THE SAME
CN 114424128 B	非线性模型的建模方法、装置及存储介质
DE 10 2024 204 633 B3	Verfahren zur integritätssichernden Übertragung mindestens eines Messdatums
EP 3 889 443 B1	SUCTION LIFTING DEVICE FOR EMPTYING A TANK
US 12,166,433 B2	Power converter and method for operating a power converter
CN 112740843 B	按压装置
EP 4 168 744 B1	FUNCTIONAL SAFETY HIGH-SPEED FAIL-SAFE COUNTER MODULE
CA 3078357 C	MOBILE TAG SENSING AND LOCATION ESTIMATION
CA 3057973 C	SYSTEM FOR AUTOMATED GENERATIVE DESIGN SYNTHESIS USING DATA FROM DESIGN TOOLS AND KNOWLEDGE FROM A DIGITAL TWIN GRAPH
CN 117148884 B	温度控制方法、装置、电子设备和存储介质
EP 3 959 847 B1	COMPUTER-IMPLEMENTED METHOD FOR ADAPTING AT LEAST ONE PREDEFINED FRAME DELAY
CN 113811823 B	过程对象之间的相关性
CN 115140124 B	在车辆起动后在路网中定位轨道导引的车辆的方法和装置
DE 10 2024 202 759 B4	Hochgeschwindigkeitstriebzug
EP 3 871 326 B1	SELF-ACTUATED INVERTER AND OPERATION OF SAME
CN 115461264 B	运输工具卫生设施单元的舒适通风
EP 3 801 131 B1	FOLDING TABLE DEVICE
EP 4 371 084 B1	METHOD FOR PROVIDING TRAINING IMAGE DATA FOR TRAINING A FUNCTION
CN 114651231 B	安全地启动电子设备的设备软件、尤其是操作系统的方法
CN 112438022 B	确保计数器正确计数的故障安全计数器评估器
CN 113474997 B	具有电流调节的电子开关
CN 114930302 B	检测集成电路芯片中的异常延迟通信
CN 115291649 B	烘箱的温度控制方法、膜包机的温度控制方法、烘箱和膜包机
US 12,160,316 B2	Method, computer readable medium and gateway device for coordinating between a plurality of wireless networks
EP 4 227 754 B1	ESTIMATES OF COOLING OR HEATING POWER
CN 117113093 B	故障诊断方法、电子设备、介质和计算机程序产品
CN 114096928 B	管理旋转系统的健康状况
EP 4 017 755 B1	VEHICLE AND METHOD FOR OPERATING SAME
EP 3 889 444 B1	SUCTION LIFTING DEVICE FOR OPERATING THE SUCTION LIFTING DEVICE
US 12,487,591 B2	Ring-closures in fault trees and normalized representation
US 12,526,168 B2	Control device for a building automation system having global data management
EP 4 008 605 B1	METHOD AND DEVICE FOR DIAGNOSING A RAILROAD SWITCH WITH A POINT MACHINE
JP 7542726 B2	車両の確認および検証のためのクリティカルシナリオの識別
US 12,683,428 B2	System for identification of loads in a residential branch of electrical circuit
EP 3 702 233 B1	MULTI-PART RAILWAY VEHICLE WITH A CARRIAGE ASSEMBLY COMPRISING A SUPPORT CARRIAGE AND TWO CARRIAGE TRANSITION MODULES
CN 116088527 B	运动控制曲线的极限最大速度的计算方法、运动控制方法
US 12,111,333 B2	Sensor arrangement, apparatus for position determination, rail vehicle and method for position determination for a rail vehicle
EP 4 156 003 B1	GRANTING ACCESS TO A COMPONENT OF A TECHNICAL SYSTEM
EP 4 136 513 B1	CONFIGURATION DEVICE, UPDATE SERVER AND METHOD FOR SOFTWARE UPDATE OF A TECHNICAL INSTALLATION
EP 4 306 818 B1	ACTUATING FORCE COUPLING
EP 3 904 983 B1	TOOL REPLACEMENT RECORD-BASED CUTTING TOOL LIFE SETTING METHOD, APPARATUS AND SYSTEM
US 12,100,222 B2	Method and device for operating a video monitoring system for a rail vehicle
US 12,437,950 B2	Plug-in summation current transformer module, rail-mounted device, and assembly method
CN 112805754 B	用于CAD操作的方法和数据处理系统

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 931 063 B1	DEVICE AND METHOD FOR DETECTING A WHEEL MOVING ALONG A RAIL TRACK
IN 574963 B	SYSTEMS AND METHODS TO ASSESS AND REPAIR DATA USING DATA QUALITY INDICATORS
EP 4 361 572 B1	AVERAGING ARRANGEMENT AND/OR ANALYZER
CN 110546657 B	用于评估组件的生命周期的方法和设备
EP 4 007 710 B1	DISPLAY OF AN OCCUPIED AND UNOCCUPIED SEAT IN A VEHICLE FOR TRANSPORTING PASSENGERS
US 12,265,371 B2	Method for optimizing the occupancy of magazine spaces by tools in a computer-supported manner
US 12,182,006 B2	Method and computing environment for creating and applying a test algorithm for computational processes
CN 115087981 B	计算机辅助设计对象的微观结构和对象边界的组合式表示
CN 116243651 B	跨周期凸轮曲线创建与同步控制方法、系统、介质以及电子设备
US 12,498,711 B2	Computer-implemented method and condition monitoring device for detecting mechanical damage to a machine
US 11,999,396 B2	Automated on-vehicle control system for a rail vehicle
US 12,328,226 B2	Automated application service detection for configuring industrial communication networks
US 12,261,499 B2	Mechanical device for converting direct current into alternating current
DE 10 2024 204 601 B3	Hilferufeinrichtung mit Rückstellfunktion sowie Verfahren zum Betreiben einer solchen Hilferufeinrichtung
CN 116943816 B	用于以工业规模制造电池的悬浮液的方法和设备
EP 3 761 335 B1	ELECTRONIC SWITCHING DEVICE
US 12,246,766 B2	Concealed asset locator
EP 4 104 100 B1	USER INTERFACE DEVICE FOR AUTONOMOUS MACHINE VISION INSPECTION
EP 4 060 439 B1	SYSTEM AND METHOD FOR FEEDING CONSTRAINTS IN THE EXECUTION OF AUTONOMOUS SKILLS INTO DESIGN
EP 4 341 145 B1	LARGE COMPONENT FOR A RAIL VEHICLE
US 12,088,668 B2	Centralized management of containerized applications deployed on distributed gateways
US 12,346,479 B2	Privacy preservation of data over a shared network
CN 112631154 B	在云计算环境中安全地执行自动化程序的装置和方法
CN 116491108 B	边缘设备和用于在边缘设备上提供冗余功能的方法
US 12,510,262 B2	Weighted return temperature limitation
IN 460914 B	ATTACHMENT FOR INTERNAL FIXTURES OF VEHICLES
CN 112055837 B	一种工业设备匹配方法和装置
AT 524098 B1	Fluidische Überwachungseinrichtung und fluidisches Überwachungsverfahren für Radsätze von Schienenfahrzeugen
KR 102923510 B1	라벨링된 합성 훈련 데이터 세트들을 제공하기 위한 방법 및 시스템 그리고 그들의 사용
US 12,368,605 B2	Requesting a certificate in a documented manner using a registration point
EP 4 320 836 B1	AUTOMATED APPLICATION SERVICE DETECTION FOR CONFIGURING INDUSTRIAL COMMUNICATION NETWORKS
CN 117584536 B	自适应的裁切压线控制方法和控制装置
US 11,884,173 B2	Network-based energy management of electric vehicle (EV) charging network infrastructure
EP 3 824 405 B1	ORIENTATION DETECTION IN OVERHEAD LINE INSULATORS
CN 116711288 B	用于分布式边缘节点部署的数据流图的集中式管理
US 12,216,009 B2	Arrangement and method for determining temperatures of electronic components
EP 3 961 320 B1	METHOD AND DEVICE FOR GUIDING THE MOVEMENT OF A MOVABLE MACHINE ELEMENT OF A MACHINE
DE 10 2023 203 681 B3	Sensoranordnung, Fahrwerk und spurgeführtes Fahrzeug
GB 2623622 B	Method and arrangement for identifying a ground fault in a drive unit of a vehicle
EP 4 327 178 B1	DEVICE AND METHOD FOR COMPUTER-AIDED MONITORING OF TWO TIME BASES OF TWO COMMUNICATION DEVICES
DE 10 2022 209 996 B3	Geschwindigkeitssteuerung
CN 115605389 B	用于支撑扭矩的装置
US 12,271,188 B2	System and method for managing control performance of a building automation device
CN 113257630 B	一种断路器附件和断路器组件
CN 115667047 B	用于轨道车辆的行走机构
KR 102993278 B1	밸브 특성 파라미터들을 측정하기 위한 방법 및 디바이스
US 11,945,484 B2	Shunt frequency check and transmit system
CN 112513887 B	神经逻辑控制器
US 12,304,072 B2	Reinforcement learning for contact-rich tasks in automation systems
EP 4 211 521 B1	AUTOMATICALLY GENERATING TRAINING DATA OF A TIME SERIES OF SENSOR DATA
EP 3 834 983 B1	SEPARATION POSITIONING MECHANISM AND ROBOT POSITIONING SYSTEM
US 12,082,333 B2	Electronic module, method for producing an electronic module, and industrial plant

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
AT 527801 B1	Stromabnehmer für ein Fahrzeug
US 12,008,300 B2	Machine learning-based unravel engine for integrated circuit packaging design
CN 112639639 B	用于工业通信的自适应中继器
AU 2021329227 B2	Systems and methods for HVAC equipment predictive maintenance using machine learning
CN 111276374 B	低压保护开关装置
US 12,072,720 B2	Method for monitoring and controlling a current distribution in an installation
EP 3 771 009 B1	METHOD AND DEVICE FOR CLEANING A FUEL CELL COMPONENT BY MEANS OF COMPRESSED AIR, AND RAIL VEHICLE
CN 114365113 B	用于自主系统的基于知识的信息建模服务平台
AU 2021351885 B2	Method for operating an energy system, and energy system
AT 528753 B1	Stromversorgungseinrichtung für Fahrzeuge
EP 3 956 970 B1	ELECTRIC MOTOR AND RAIL VEHICLE
GB 2624801 B	Method and system for prescriptive messaging
EP 3 539 842 B1	SYSTEM FOR LONGITUDINAL AND TRANSVERSAL FIXING OF A BALISE IN A THREE RAIL TRACK
US 12,388,807 B2	Method and system for securing asset data in a computing environment
AU 2023380784 B2	TRANSFORMER SHIELDING WITH RESONANCE-DAMPING GROUND CONNECTION
US 12,443,857 B2	Method and system for semi-automated generation of machine-readable skill descriptions of production modules
EP 4 208 651 B1	DEVICE FOR MONITORING A SHAFT COUPLING COUPLING A FIRST SHAFT AND A SECOND SHAFT
CN 114274139 B	自动喷涂方法、装置、系统和存储介质
DE 10 2022 200 780 B4	Kommunikationsverfahren und Kommunikationssystem zum Betrieb eines spurgebundenen Fahrzeugs
CN 115885222 B	机器控制器以及用于配置和使用机器控制器的方法
EP 4 300 295 B1	METHOD AND APPARATUS FOR EXECUTING WORKFLOW TASK ACROSS CONTROL OBJECTS
CN 112950023 B	在线监控开关设备的方法及装置
EP 4 388 443 B1	METHOD, SYSTEM, DEVICE FOR TOPOLOGY OPTIMIZATION, TOPOLOGY OPTIMIZED COMPONENT
EP 4 091 185 B1	SWITCHING ARRANGEMENT FOR MEDIUM VOLTAGE
EP 4 367 705 B1	CONTACT CARRIER FOR VACUUM SWITCH, VACUUM SWITCH AND METHOD OF MANUFACTURING A CONTACT CARRIER
US 12,233,688 B2	Refrigeration arrangement for a motor vehicle
US 11,885,542 B2	Expansion valve
US 12,517,743 B2	System and method for modeling memory devices with latency
CN 110915250 B	用于在安全关键系统内提供子系统的安全操作的方法
CN 113647080 B	以密码保护的方式提供数字证书
EP 4 220 207 B1	METHOD AND DEVICE FOR ESTIMATING THE CAPACITY OF AN ENERGY STORE
DE 10 2023 209 516 B3	Verfahren für ein verbessertes Condition Monitoring eines Leistungsschalters, Leistungsschalter und Schaltfeld mit einem solchen Leistungsschalter
EP 3 976 365 B1	SEPARATION OF STATES OF MECHANICAL PRESSES BY ANALYSING TRAINED PATTERNS IN A NEURAL NETWORK
CN 112689804 B	将技术设施的资产的数据集成到平台中的方法、数字平台和计算机程序产品
DE 10 2020 202 595 B4	Bedieneinheit für einen Erdungsschalterantrieb einer luftisolierten Schaltanlage
US 11,933,838 B2	Managing health condition of a rotating system
EP 3 649 768 B1	METHOD FOR THE SECURE REPLACEMENT OF A FIRST MANUFACTURER CERTIFICATE ALREADY INCORPORATED INTO A DEVICE
CN 115885115 B	关节组件及机器人
CN 113853509 B	用于指针仪表的光学读取装置
EP 4 565 928 B1	MONITORING EXOTHERMAL REACTIONS IN A REACTOR
CN 114766087 B	传输数据的传输设备
US 12,267,037 B2	Half-step motor driver
EP 4 014 447 B1	INTERFERENCE REDUCTION IN TELECOMMUNICATION NETWORKS
EP 3 921 912 B1	SWITCH DEVICE FOR A DC VOLTAGE CIRCUIT
CN 113165673 B	用于驱动具有不同的能量供应系统的机车的装置
IN 478473 B	VENTILATION MODULE FOR A RAIL VEHICLE
EP 3 999 992 B1	A METHOD FOR COMPUTER-IMPLEMENTED GENERATION OF A STATE MACHINE FROM A SIMULATED TECHNICAL COMPONENT IN A BLOCK-BASED SIMULATION MODEL
CN 112506133 B	具有位置额定值的缓存的数控装置
EP 4 122 796 B1	METHOD AND DEVICE FOR CHECKING CARD DATA AND / OR SENSOR DATA
CN 112673469 B	制造功率模块单元的方法、功率模块单元、电源部件和变频器
EP 4 300 221 B1	PROCESS CONTROL SYSTEM AND DEVICE AND METHOD FOR CONTROLLING A PROCESS SYSTEM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115397713 B	用于在轨道交通工具中提高附着系数的设备
EP 3 718 031 B1	A METHOD OF OPERATING A CAD SYSTEM MODEL FOR MODELLING AN ARTICLE TO BE MANUFACTURED
EP 4 482 126 B1	METHOD AND SYSTEM FOR DATA TRANSMISSION WITHIN AN INDUSTRIAL AUTOMATION SYSTEM AND AUTOMATION DEVICE
EP 3 961 326 B1	METHOD AND SYSTEM FOR OPTIMAL MANUFACTURE OF A PRODUCT
EP 3 895 021 B1	GENERATION OF TEST MODELS FROM BEHAVIOR DRIVEN DEVELOPMENT SCENARIOS BASED ON BEHAVIOR DRIVEN DEVELOPMENT STEP DEFINITIONS AND SIMILARITY ANALYSIS USING NEURO LINGUISTIC PROGRAMMING AND MACHINE LEARNING MECHANISMS
CN 117677831 B	用于生成预测部件疲劳寿命的测试试样规范的方法和系统
EP 4 327 110 B1	DETERMINING METHOD AND APPARATUS FOR WORKING VOLTAGE OF ISOLATED NEUTRAL SYSTEM
US 11,940,472 B2	Method for checking load circuits in a technical installation
EP 3 823 878 B1	SYSTEM AND METHOD OF CONTROLLING A RAILWAY VEHICLE DURING DRIVERLESS SURVEILLED OPERATION WITH A SURVEILLING PERSON
EP 3 734 384 B1	METHOD AND DEVICE FOR MONITORING AN OPERATIONAL STATUS OF A SYSTEM
EP 4 016 202 B1	METHOD FOR REPRODUCING NOISE COMPONENTS OF LOSSY RECORDED OPERATING SIGNALS AND CONTROL DEVICE
CN 113678076 B	用于监控铣削工艺的方法和装置
EP 4 158 506 B1	METHODS AND SYSTEMS FOR CONTROLLING ACCESS TO AT LEAST ONE COMPUTER PROGRAM
EP 3 853 878 B1	FUSE ELEMENT AND FUSE
CN 111045412 B	用于运行设施设备的方法以及设施设备
US 12,382,492 B2	WLAN communication methods and devices
CN 113551764 B	振动分析设备及其方法
CN 116034326 B	用于异常检测的监测设备和方法
KR 102632546 B1	소스 네트워크로부터 타겟 네트워크로 소프트웨어 아티팩트를 전송하기 위한 방법 및 시스템
US 12,562,329 B2	Exhaust gas module for an electrical switch, device formed by two exhaust gas modules of this type and switch cabinet comprising a device of this type
CN 114928038 B	电能产生方法及电能变换系统
EP 3 664 465 B1	METHOD FOR OPERATING A COMMUNICATION SYSTEM FOR TRANSFERRING TIME-CRITICAL DATA, AND COMMUNICATION CONTROL DEVICE
US 12,026,595 B2	Method and system for detecting building objects installed within a building
CN 114080577 B	故障树中的环闭合和规范化表示
US 11,789,487 B2	Asynchronous interface for transporting test-related data via serial channels
EP 4 423 473 B1	DEVICE AND METHOD FOR DETECTING CHANGES IN A VALUE OF A PHYSICAL QUANTITY
US 11,921,005 B2	System, apparatus and method for estimating remaining useful life of a bearing
US 11,773,909 B2	Method and apparatus of assembling one or more bearings
US 12,169,924 B2	System and method for set up of production line inspection
US 11,784,790 B2	Method for operating keystream generators for secure data transmission, the keystream generators being operated in counter mode, keystream generator having counter mode operation for secure data transmission, and computer program product for keystream generation
EP 4 049 431 B1	TRANSMISSION DEVICE FOR TRANSMITTING DATA
US 11,962,203 B2	Method for monitoring the operation of a drive component
US 12,244,132 B2	Circuit breaker device and method
EP 3 681 778 B1	DEVICE ON BOARD A VEHICLE FOR RECEIVING INFORMATION FROM A WAYSIDE TRANSMITTER
US 12,001,227 B2	Operating method for a valve system, control unit and computer program product
CN 111328395 B	用于提供对网络设备的硬件组件接口的受限访问的方法
CN 112912812 B	用于运行阀的方法、相关的电子操控单元和阀驱动装置
US 12,541,805 B2	Smart building data connector
US 12,130,833 B2	Block formation device and block formation method, node device and block confirmation method
EP 4 028 837 B1	INDUCTION VOLTAGE BASED CONTROL OF A SENSOR NETWORK
US 12,468,614 B2	Method for determining heat-sink contamination by means of artificial intelligence
EP 3 987 742 B1	FILTER, ASSEMBLY, AND METHOD FOR OPERATING AN ASSEMBLY
EP 4 430 661 B1	ARRANGEMENT FOR A SEMICONDUCTOR DEVICE COMPRISING AT LEAST ONE PASSIVE COMPONENT AND A SUBSTRATE
EP 4 293 957 B1	METHOD AND ASSEMBLY FOR CREATING A CONTROL SIGNAL
US 12,213,287 B2	Heat sink for a solid-state circuit breakerin an electrical panel
EP 4 334 834 B1	COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR CHECKING DATA ANONYMIZATION
CN 115219785 B	确定电力系统的频率的方法与装置
US 12,117,879 B2	Control system and associated method for startup, control and monitoring of power supply components

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 114365166 B	用于生成建筑物自动化项目的方法和设备
EP 4 485 295 B1	LABELLING OF USER ACTION DATA IN A USER ENVIRONMENT
EP 4 205 009 B1	METHOD FOR CHECKING INTEGRITY OF RELOADABLE FUNCTIONAL UNITS
IN 582828 B	ARRANGEMENT AND METHOD FOR DETERMINING TEMPERATURES OF ELECTRONIC COMPONENTS
EP 3 729 348 B1	SYSTEM AND METHOD FOR GENERATING A PLANT BILL OF PROCESS
EP 4 139 073 B1	PREHEATING A BUILD PLATE FOR ADDITIVE MANUFACTURING
EP 4 487 188 B1	CONTROL SYSTEM FOR A TECHNICAL PLANT WITH COLLABORATION FUNCTIONALITY AND METHOD OF OPERATION
CN 114278782 B	用于风门旋转驱动器的轴容纳件和风门旋转驱动器
CN 113874856 B	设计参数值生成方法、装置和计算机可读介质
US 11,863,533 B2	Arrangement and method for functionally safe connection identification
US 11,855,984 B2	Method and system of providing secure access to a cloud service in a cloud computing environment
EP 4 135 281 B1	INDUSTRIAL CONTROL SYSTEM SAFETY ANALYSIS METHOD AND APPARATUS, AND COMPUTER-READABLE MEDIUM
EP 4 374 225 B1	DEFECTIVITY QUANTIFIER DETERMINATIONS FOR LITHOGRAPHICAL CIRCUIT FABRICATION PROCESSES THROUGH OFF-TARGET PROCESS PARAMETERS
EP 4 150 729 B1	METHOD FOR MONITORING A COIL TEMPERATURE
US 11,869,327 B2	Fire or smoke alarm
US 12,033,813 B2	Vacuum switching device for medium- and high-voltage applications
CN 113196192 B	用于将工业过程装备的描述转换成数据信息模型的网关和方法
IN 580621 B	PNEUMATIC MODULE FOR A GAS ANALYSIS DEVICE, PRODUCTION METHOD AND COMPUTER PROGRAM PRODUCT
US 11,917,081 B2	Issuing device and method for issuing and requesting device and method for requesting a digital certificate
US 12,263,595 B2	Method and apparatus for determining an optimized movement sequence for a robot device
CN 113366397 B	规划系统中查管道一致记录的方法、规划系统和控制程序
CN 116209903 B	用于场探头组合的接头
US 12,320,384 B2	System, apparatus, and method of determining condition of a bearing
US 12,429,838 B2	Building automation system and method for managing causal chain for fault detection and diagnostics
US 11,967,820 B2	Method and apparatus for deploying power quality monitoring device
US 12,596,588 B2	Edge computing method and system, edge device and control server providing more computing resources for edge computing applications
CN 114616571 B	兴趣点周围的半导体布局环境
EP 4 443 100 B1	CHECKING THE DIMENSIONAL STABILITY OF A WORKPIECE WITH A SWITCHING MEASURING PROBE
US 12,267,248 B2	Network infrastructure device, communication terminal and method for synchronizing control applications via a communication network for transferring time-critical data
EP 3 767 909 B1	METHOD AND COMMUNICATION UNIT FOR CRYPTOGRAPHICALLY PROTECTED UNIDIRECTIONAL DATA TRANSMISSION OF USEFUL DATA BETWEEN TWO NETWORKS
SG 11202010218 B	MOBILE TAG SENSING AND LOCATION DETERMINATION
EP 3 741 031 B1	METHOD FOR PRODUCING A SQUIRREL-CAGE ROTOR
US 12,205,331 B2	Data compression for multidimensional time series data
IN 574402 B	SYSTEM AND METHOD FOR CONFIGURING, COMMISSIONING AND TROUBLESHOOTING AN HVAC UNIT
EP 4 340 180 B1	PERMANENTLY EXCITED DYNAMO-ELECTRIC MACHINE
US 12,412,090 B2	Method and apparatus for providing recommendations for completion of an engineering project
CN 114600049 B	对传感器网络进行的基于感生电压的控制
EP 3 785 355 B1	METHOD FOR PRODUCING A MATERIAL LAYER AND A MATERIAL LAYER STRUCTURE FOR A DYNAMOELECTRIC ROTARY MACHINE
US 12,111,733 B2	Orchestrating a container-based application on a terminal device
CN 113168149 B	用于自动化装置的扩展装置
TW I871733 B	充電電路、充電方法、電子設備和存儲介質
CN 111670569 B	针对基础设施的警告消息路由
EP 3 873 009 B1	METHOD FOR SYNCHRONISING CONTROL APPLICATIONS OVER A COMMUNICATIONS NETWORK FOR TRANSMITTING TIME-CRITICAL DATA, NETWORK INFRASTRUCTURE DEVICE AND COMMUNICATIONS END DEVICE
CN 115149630 B	现场设备能量管理单元
EP 4 402 772 B1	METHOD FOR POWER CONTROL
EP 3 961 335 B1	SYSTEM, APPARATUS AND METHOD FOR ESTIMATING REMAINING USEFUL LIFE OF A BEARING
EP 3 928 170 B1	HARNESS ASSEMBLY LINE BALANCING
AT 528313 B1	Stromversorgungseinrichtung für Fahrzeuge

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,384,665 B2	Method for the collision-free movement of a crane
EP 3 918 524 B1	APPARATUS FOR THE SEMANTIC-BASED OPTIMIZATION OF PRODUCTION FACILITIES WITH EXPLAINABILITY
CN 113678352 B	用于制造磁片和磁片堆叠的方法以及电机和电动交通工具
EP 4 259 504 B1	MOUNTING INTERFACE AND BUFFER SYSTEM FOR A RAIL VEHICLE
CN 110889707 B	追踪产品部件的计算机实现方法、系统和计算机程序产品
EP 3 836 489 B1	DYNAMIC ALLOCATION OF AUTOMATION UNITS TO AUTOMATION SERVERS
US 12,380,594 B2	Pose estimation method and apparatus
US 12,483,184 B2	Temperature determination method for magnet temperatures on magnets of electric motors
CN 116174878 B	焊接控制方法及焊接自动机
EP 4 292 009 B1	VARIABILITY CHARACTERIZATION WITH TRUNCATED ORDERED SAMPLE SIMULATION
CN 115691146 B	停车系统中调整摄像头的方法和装置
CN 116209963 B	故障诊断及解决方案推荐方法、设备、系统和存储介质
CN 113829116 B	减振系统和机床
US 12,455,726 B2	Graphical programming method, processor, and terminal
EP 3 954 083 B1	ESTABLISHING SECURE COMMUNICATION WITHOUT LOCAL TIME INFORMATION
EP 3 652 849 B1	COUPLING BETWEEN CIRCUITS IN DRIVE NETWORKS
EP 4 379 671 B1	ASSESSMENT OF INPUT-OUTPUT DATASETS USING LOCAL COMPLEXITY VALUES AND ASSOCIATED DATA STRUCTURE
EP 3 967 017 B1	METHOD, APPARATUS, COMPUTER PROGRAM, COMPUTER-READABLE STORAGE MEDIUM, SYSTEM AND RAIL VEHICLE FOR OPERATING A NETWORK SWITCH, FOR EXAMPLE A SWITCH OR ROUTER
CN 113056965 B	用于组装电气设备的方法和相关联的电气设备
CN 112715041 B	用于识别设备的方法和装置及计算机可读存储介质和程序
JP 7362697 B2	ナビゲーションプロシージャにおける第１パノラマ画像と第２パノラマ画像とを位置合わせする方法およびデータ処理システム
EP 3 837 709 B1	LOW-VOLTAGE CIRCUIT BREAKER
CN 112582368 B	电路载体、封装及其制造方法
US 12,307,165 B2	Method and device for generating a digital model of a building
EP 3 979 166 B1	METHOD AND SYSTEM FOR AUTOMATICALLY DISTRIBUTING ASSET POOL SHARES AMONG ACTORS IN A BLOCKCHAIN NETWORK
EP 3 680 813 B1	METHOD AND SYSTEM FOR DETECTING OBJECTS INSTALLED WITHIN A BUILDING
CA 3175646 C	CLOCK DOMAIN TRANSLATION FOR NON-SYNCHRONIZED SENSORS
US 12,088,150 B2	Vibration damping in a machine tool having multiple vibration detection
IN 466418 B	METHOD FOR PRODUCING A CONTACT COMPONENT, AND CONTACT COMPONENT, VACUUM INTERRUPTER AND SWITCHGEAR
EP 3 853 676 B1	CONSTRAINED OPERATION OF A FIELD DEVICE
EP 4 128 337 B1	POWER MODULE WITH AT LEAST THREE POWER UNITS
US 12,276,682 B2	Method for monitoring the status of an apparatus and assembly
US 11,832,425 B2	Support for electric components
EP 4 288 315 B1	METHOD AND SYSTEM FOR DETERMINING OPERATING PERFORMANCE PARAMETERS OF A DEVICE
DE 10 2023 208 353 B4	Schutzschaltgerät mit Drucktaste
US 12,384,433 B2	Method and arrangement for determining the movement state of a rail vehicle wheel
US 12,592,235 B2	NLU-based systems and method for the facilitated control of industrial assets
US 12,266,489 B2	Electrical network
EP 4 163 165 B1	METHOD AND DEVICE FOR SECURE VEHICLE MONITORING
DE 10 2024 208 161 B4	Sichere Vornahme von entfernt veranlassten Handlungen eines Niederspannungsgeräts
CN 112752671 B	用于向轨道车辆中的传感器装置供应能量的设备和方法
IN 543715 B	METHOD OF STATUS MONITORING
EP 3 992 870 B1	OCCUPANCY DETERMINATION METHOD AND SYSTEM
CN 111433774 B	用于系统的完整性确认的方法和确认装置
US 12,354,376 B2	Systems and methods for visual inspection of signal lights at railroad crossings
US 11,973,434 B2	Clamping circuit in a rectifier with more than two potentials provided on the output side
CN 115769212 B	用于物理零件的3D打印的热量感知工具路径生成
DE 10 2024 203 105 B3	Synchronisation von einem Sender und einem Empfänger
US 11,764,975 B2	Method for validating a digital user certificate
CN 112469611 B	轨道车辆的驱动控制器

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 799 678 B1	FAIL-SAFE COUNTER EVALUATOR TO INSURE PROPER COUNTING BY A COUNTER
CN 115427286 B	用于监测停放的轨道交通工具的位置的方法和尤其用于列车保护系统的计算机程序
US 12,377,889 B2	Energy dissipation device
US 12,298,740 B2	System and method for assisted modeling of manufacturing workflows
US 12,358,544 B2	Arrangement for the transmission of process data
EP 4 101 726 B1	SYSTEM FOR TESTING THE CORRECT SEQUENCE AND TRANSMISSION OF BEACON AND / OR LOOP TELEGRAMS PROVIDED FOR AN ON-BOARD UNIT OF A VEHICLE
EP 3 990 681 B1	COLD GAS INJECTION SYSTEM WITH ADJUSTABLE PARTICLE BEAM
US 12,228,175 B2	Axle receiving arrangement for an air vent rotary drive and air vent rotary drive
US 12,322,968 B2	Certification of at least one installation-specific amount of energy of an energy system
EP 3 807 728 B1	PROCESS CONTROL UNIT AND METHOD FOR INTERPROCESS EXCHANGE OF PROCESS VARIABLES
US 12,101,308 B2	Managing a SSO session by an identity provider
EP 4 260 152 B1	COMPUTER-IMPLEMENTED METHOD AND DEVICE FOR RESOLVING CLOSED LOOPS IN AUTOMATIC FAULT TREE ANALYSIS OF A MULTI-COMPONENT SYSTEM
US 12,455,547 B2	Managing a postprocessor for machining with a machine tool method, computer system, and machine tool
US 12,033,225 B2	Dynamic deploying a mom module across a plurality of layers
US 12,469,661 B2	DC solid-state circuit breaker with fail-safe redundancy via double power electronics and overvoltage protection
AT 525689 B1	Schienenfahrzeug
US 12,362,651 B2	Circuit arrangement for a current converter
EP 4 121 913 B1	A NEURAL NETWORK SYSTEM FOR DISTRIBUTED BOOSTING FOR A PROGRAMMABLE LOGIC CONTROLLER WITH A PLURALITY OF PROCESSING UNITS
CN 113196185 B	补偿弹性相关的位置误差的位置调节控制
US 12,650,322 B2	Functional safety high-speed fail-safe counter module
AU 2022306458 B2	METHOD FOR FITTING A MEASURING DEVICE ON A TUBE
EP 3 932 775 B1	METHOD AND DEVICE FOR INFLUENCING THE FRICTION BETWEEN WHEEL AND RAIL
IN 509456 B	FOUR-POLE SYNCHRONOUS RELUCTANCE MOTOR
US 12,466,453 B2	Device and method for responding to loss-of-brake on a railroad crossing gate mechanism
EP 4 343 995 B1	POWER SWITCH
US 12,340,493 B2	Centralized analytics of multiple visual inspection appliances
IN 555172 B	METHODS AND SYSTEMS FOR PROVIDING DATA FROM AN INTERNAL DATA PROCESSING SYSTEM OF AN INDUSTRIAL PLANT TO AN EXTERNAL DATA PROCESSING SYSTEM
US 12,358,393 B2	Modular measuring unit and authentication apparatus for detecting energy output
CN 112395131 B	集成电路芯片设备中的消息路由
CN 111316561 B	永磁激励同步电机的运行
US 12,620,176 B2	Automated aerial data capture for 3D modeling of unknown objects in unknown environments
CN 113950652 B	技术系统的计算机辅助配置
EP 4 643 497 B1	AUTHENTICATION AS A FUNCTION OF OTHER DIGITAL CERTIFICATES
CN 110893980 B	烟感探头自动化生产线
EP 4 036 663 B1	CONTROL SYSTEM FOR CONTROLLING A TECHNICAL SYSTEM AND METHOD FOR CONFIGURING THE CONTROL DEVICE
CN 116457143 B	离线和/或在线识别机床、至少一个机床工具或在机床中加工的至少一个工件的状态的方法
US 12,263,642 B2	Method and system for determining an amount of printing material powder in a multiobject build job
US 12,639,936 B2	Surveillance system having a person detector
CN 113196439 B	具有集成的测量功能的熔断保险装置以及保险体
EP 4 108 537 B1	METHOD FOR PRODUCING A VEHICLE HEAD
US 12,400,846 B2	Interactive analysis of mass spectrometry data including peak selection and dynamic labeling
EP 4 149 879 B1	DETERMINING THE LOAD OF A DRIVER DEVICE
US 12,547,393 B2	System and method for reliable over-the-air firmware updates
CN 114424196 B	非线性模型的线性化处理方法、装置及存储介质
US 12,316,119 B2	Filter apparatus with reconfigurable choke unit changeover switch and capacitor unit for different AC voltage networks
JP 7823195 B2	レコメンダシステムを提供する方法及びデバイス
EP 4 246 262 B1	METHOD AND DEVICE FOR MONITORING A STATE OF A COMPONENT OF A PROCESS ENGINEERING PLANT
IN 587651 B	UNDERFRAME FOR A RAIL VEHICLE CAR BODY
US 11,810,745 B2	Apparatus for compensating for resistance tolerances of a fuse for a circuit and line driver for a connection of a communication device

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115385264 B	用于稳定具有多个牵引机构的伸缩剪的装置
DE 10 2021 201 524 B4	Vorrichtung zum Spannen eines Energiespeichers und Verfahren zum Spannen eines Energiespeichers
US 11,975,749 B2	Mounting interface and buffer system for a rail vehicle
CN 116113964 B	参数优化方法、装置和计算机可读存储介质
EP 3 918 537 B1	CLUSTER BASED CLASSIFICATION FOR TIME SERIES DATA
GB 2611306 B	Calculation of more accurately estimated location of ground fault short circuits in complex railway power supply arrangements
US 12,686,293 B2	Electric vehicle (EV) driver application (APP) to identify a driver charging profile for automatic selection in a charging session
EP 4 331 174 B1	CONTROL SYSTEM FOR A TECHNICAL INSTALLATION AND METHOD FOR TRANSMITTING A CERTIFICATE REQUEST OF AN INSTALLATION COMPONENT
US 12,443,473 B2	Method for performing a technical process in regular operation and repair operation
CN 114830048 B	完备性监测系统和运行完备性监测系统的方法和完备性监测单元
CN 114667455 B	用于测试电路的通用压缩器架构
US 12,579,354 B2	Correct-by-construction filler cell insertion
KR 102592162 B1	조정된 조화된 조건들에서 에너지 서브-시스템들 사이의 에너지의 교환을 제어하기 위한 방법; 제어 센터; 에너지 시스템; 컴퓨터 프로그램; 및 저장 매체
CN 111226204 B	无反作用地且完整性受保护地同步日志数据的方法和设备
CN 112868217 B	自动处理数据标识符的方法、数据载体和计算机系统
EP 3 808 511 B1	METHOD FOR MONITORING A WORKING ENVIRONMENT AND MONITORING DEVICE
CN 115326776 B	用于测量流体的至少两个不同组分的测量设备和方法
EP 3 666 047 B1	COOLING SYSTEM WITH PARALLEL COOLING CHANNELS
US 11,823,988 B2	Semiconductor module comprising a housing
EP 4 256 210 B1	WASHER FOR COVERING SLOTS
US 12,487,583 B2	Parameter optimization method, device, and storage medium
US 11,898,889 B2	Pressure and flow rate measuring cell
US 11,938,978 B2	Determination of train direction for bi-directional grade crossings
IN 578465 B	METHOD FOR REMOTE ASSISTANCE AND DEVICE
EP 4 012 926 B1	DIRECT CURRENT SWITCH
CN 113646714 B	生产设备的加工参数设置方法、装置和计算机可读介质
DE 10 2023 208 338 B4	Erkennen einer thermischen Überlastung von Komponenten einer Schaltanlage
EP 3 899 674 B1	DATA SYNCHRONIZATION SYSTEM FOR DEVICE BASED ENGINEERING
EP 4 458 116 B1	COMPUTER-IMPLEMENTED METHOD FOR DETERMINING A SET OF MODULE TYPES OF A PREDETERMINED SET OF MODULE TYPES AND AN ASSOCIATED MODIFIED FIXED SETUP
CN 113847889 B	断路器主轴的连接臂角度测量装置、方法和系统
EP 4 466 172 B1	VEHICLE FOR PASSENGER TRANSPORT WITH A PRESSURE PROTECTION DEVICE
EP 3 885 776 B1	METHOD, COMPUTER-IMPLEMENTED TOOL AND BATTERY MANAGEMENT SYSTEM FOR ESTIMATING STATES OF HEALTH OF BATTERIES STORING ELECTRICAL ENERGY AND BATTERY ENERGY STORAGE SYSTEM
CN 114123675 B	用于制造电机的方法以及设备和车辆
IN 553199 B	METHOD FOR SELF-LEARNING MANUFACTURING SCHEDULING FOR A FLEXIBLE MANUFACTURING SYSTEM AND DEVICE
US 11,928,481 B2	Method and system for determining optimal computing configuration for executing computing operation
CN 114026403 B	机器状态的声学分析
EP 4 523 083 B1	SYSTEM AND COMPUTER-IMPLEMENTED METHOD FOR UPGRADING AND/OR UPDATING AT LEAST ONE SERVICE OF A PLURALITY OF SERVICES
EP 3 891 565 B1	COMPONENT COMPRISING A MAIN MODULE AND AN EXTENSION MODULE AND COMPONENT CALIBRATION METHOD
CN 111869160 B	用于将消息从发送装置安全传输到接收装置的方法和设备
CN 115803709 B	编程标记方法和处理器、终端及计算机程序产品
IN 514235 B	DEVICE AND METHOD FOR SUPPLYING ENERGY TO A SENSOR DEVICE IN A RAIL VEHICLE
US 12,186,765 B2	Device for providing mist to a surrounding environment
EP 4 507 953 B1	METHOD AND SYSTEM FOR DETERMINING THE ENERGY CONSUMPTION OF A RAIL VEHICLE
EP 4 356 596 B1	METHOD AND SYSTEM FOR PROVIDING TIME-CRITICAL SERVICES BY MEANS OF A PROCESS CONTROL ENVIRONMENT
US 12,495,533 B2	Method and device for populating circuit boards by fixedly assigned components on at least two assembly lines
EP 4 063 183 B1	CONTROL DEVICE FOR A MOTOR VEHICLE AND METHOD FOR OPERATING SAME
EP 3 969 346 B1	DISPLAY SYSTEM FOR A RAIL VEHICLE, AND METHOD
CN 113892219 B	电气网络

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,030,537 B2	Method for analyzing conditions of technical components
EP 3 753 802 B1	METHOD FOR GENERIC DISPLAY PROTECTION AND CONTROL SYSTEM
KR 102677041 B1	디바이스의 작동 성능 파라미터들을 결정하기 위한 방법 및 시스템
CN 116194635 B	具有锰氧化物涂层的纤维材料
CN 114555994 B	控制阀
EP 3 928 340 B1	SPRING SYSTEM FOR A DRIVE SYSTEM COMPRISING A COUPLING, SPRING SYSTEM COMPRISING A COUPLING, DRIVE SYSTEM COMPRISING A COUPLING AND A SPRING SYSTEM AND SWITCHGEAR COMPRISING SUCH A DRIVE SYSTEM
CN 115943620 B	应用在物联网中的设备
US 12,438,169 B2	Diagnostic system for condition-based maintenance of fuel cell filters
US 12,332,084 B2	Encoder outlet structure and encoder
DE 10 2023 206 442 B4	Schutzschalter
US 12,194,540 B2	Method for producing a material layer
US 12,124,244 B2	Configurable notifications about state changes of technical objects
EP 3 956 915 B1	SWITCHING DEVICE
IN 595693 B	EXTENSION DEVICE FOR AN AUTOMATION DEVICE
EP 4 160 233 B1	SYSTEM, APPARATUS AND METHOD FOR MONITORING FAULTS IN AN ELECTRIC MACHINE
US 12,151,727 B2	Rail-bound track section equipped with an automatic train protection system and method for operating the same
US 12,561,544 B2	Dynamic quick-response codes (QR codes) for electric vehicle (EV) chargers that are used for configuration/commissioning or operation at different points in time
EP 4 275 060 B1	SENSOR UNIT AND METHOD FOR IDENTIFYING FAULT CURRENTS IN A POWER SUPPLY NETWORK
US 12,025,532 B2	Device for monitoring a shaft coupling coupling a first shaft to a second shaft
AT 528740 B1	Rampensystem eines Fahrzeugs
CN 115846408 B	金属箔轧机的控制方法、装置、电子设备及存储介质
EP 4 182 801 B1	HIGH BANDWIDTH IJTAG THROUGH HIGH SPEED PARALLEL BUS
CN 116504588 B	脱扣组件及热继电器
CN 115843343 B	用于识别在链接的自动化装置中引起过程干扰的自动化组件的方法
EP 4 560 306 B1	ARRANGEMENT WITH ELECTRICALLY CONDUCTIVE FEED LINES, A SHEATHING AND A ROD-SHAPED INSULATING BODY
US 12,256,287 B2	Flexible workspace system with real-time sensor feedback for mobile check-in
CN 116300711 B	生产线的控制方法和系统
EP 3 803 522 B1	METHOD FOR PRODUCING OR MACHINING A PRODUCT AND CONTROL DEVICE FOR CONTROLLING A PRODUCTION SYSTEM
US 12,164,285 B2	Method for managing a production process
US 11,886,939 B2	System, device, method and datastack for managing applications that manage operation of assets
US 12,020,815 B2	Training method for giving treatment recommendations to a physician based on a propensity score and an outcome score
EP 3 974 234 B1	ROAD VEHICLE WITH CURRENT COLLECTOR
EP 4 299 404 B1	RAIL VEHICLE WITH CABLE CONNECTION
IN 518467 B	INDUCTION VOLTAGE-BASED CONTROL OF A SENSOR NETWORK
DE 10 2024 203 959 B3	Verfahren zur Ermittlung eines elektrischen Widerstands
EP 4 117 974 B1	AIR-CONDITIONING ARRANGEMENT AND PASSENGER TRANSPORT VEHICLE EQUIPPED THEREWITH
CN 112005176 B	用于计算机支持地模拟以自动化方式工作的机器的运行方法
US 12,210,333 B2	Method and system for determining machine safety and product quality for a flexible cyber-physical production system
EP 4 096 982 B1	ARRANGEMENT FOR INCREASING THE ADHESION COEFFICIENT IN A RAIL VEHICLE
CN 115004189 B	用于促进多个机器人任务的并发模拟的方法和系统
US 12,319,167 B2	Sending sampled meter data from an electric vehicle charger to a backend for reporting via open charge point protocol (OCPP) for use by a utility to charge a customer
EP 4 324 088 B1	METHOD AND MACHINE CONTROL SYSTEM FOR MONITORING THE TEMPERATURE OF AN ELECTRIC MACHINE
CN 112041983 B	具有在基板上的功率电子器件的功率模块和具有这种功率模块的功率电子电路
CN 116171453 B	用于生成和利用制造仿真模型的知识图谱的方法和装置
CN 116443079 B	降级列车确定系统、协同控制系统、轨道显示系统及介质
EP 4 086 724 B1	CONTROL OF COOLING AND/OR OF HEATING
EP 4 574 623 B1	METHOD AND VEHICLE CONTROL SYSTEM FOR OPERATING A RAIL VEHICLE
CN 116689554 B	折弯机及其控制方法、装置、介质、设备
DE 10 2023 203 031 B3	Netzzustandsschätzung sowie Steuerung eines Stromnetzes
EP 3 982 286 B1	COMPUTER-IMPLEMENTED METHOD AND DEVICE FOR RECONSTRUCTING A BARCODE

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115739864 B	水锤分析方法和水锤分析系统
DE 10 2024 209 488 B3	Verfahren und Vorrichtung zur Überwachung einer Notentriegelungsvorrichtung einer Einstiegstür für ein Fahrzeug des Personenverkehrs
EP 4 352 705 B1	METHOD AND APPARATUS FOR COMMISSIONING ARTIFICIAL INTELLIGENCE-BASED INSPECTION SYSTEMS
CN 113039755 B	用于工业控制系统的监测方法、装置、系统和计算机可读介质
CN 115867873 B	提供与分配给输入数据方法和系统的异常分数相关的警报
CN 115088036 B	具有用于存储器感测的自动参考微调反馈的存储器内建自测试
EP 3 794 699 B1	DEVICE AND METHOD FOR COUPLING TWO DC GRIDS
US 12,691,914 B2	Underframe for a rail vehicle car body
CN 116529034 B	生成数字孪生、方法、系统、计算机程序产品
EP 4 083 722 B1	METHOD FOR AUTOMATICALLY GENERATING A BEHAVIOR TREE PROGRAM FOR CONTROLLING A MACHINE
CN 114899050 B	断路器双金机构的调节装置
CN 116601021 B	用于在轨道车辆中传递纵向力的装置
US 12,540,954 B2	Magneto-optical sensor for monitoring of a semiconductor element in a semiconductor module
US 12,013,676 B2	Programmable logic controller-based modular acceleration module for artificial intelligence
DE 10 2025 100 123 B3	Verfahren und Vorrichtung zur Detektion einer Leckage an einem Druckbehälter
EP 3 818 229 B1	LIFTING APPARATUS
EP 3 396 538 B1	A METHOD AND APPARATUS FOR DEPLOYMENT OF AN AGENT TO A TARGET DEVICE OF A TARGET SYSTEM
CN 115398619 B	具有壳体的半导体模块
EP 4 179 758 B1	AUTHENTICATION OF A COMMUNICATION PARTNER ON A DEVICE
BR 112024000430 B1	MÉTODO DE COMUNICAÇÃO ENTRE UMA PRIMEIRA UNIDADE DE RÁDIO E UMA PRIMEIRA UNIDADE DISTRIBUÍDA, ESTAÇÃO BASE DEDICADA, E, SUB-REDE SEM FIO DEDICADA
CN 115701377 B	信号处理方法、装置、电子设备和存储介质
US 12,481,252 B2	Process controller and method and system therefor
CN 114829797 B	补偿联接件
EP 3 956 197 B1	DIAGNOSTIC SYSTEM FOR A LEVEL-CROSSING SAFEGUARDING SYSTEM, CURRENT SENSOR FOR SUCH A DIAGNOSTIC SYSTEM, AND METHOD FOR INSTALLING SUCH A DIAGNOSTIC SYSTEM
AU 2023364173 B2	SMART BUILDING DATA CONNECTOR
DE 10 2021 205 478 B4	Schaltungsanordnung zur Unterscheidung von Spannungsarten
US 11,952,017 B2	Sanding system for a rail vehicle
CN 112286511 B	配置工业自动化部件的方法及工业自动化部件
US 12,462,595 B2	Training data generator and method for generation of training datasets
EP 3 837 673 B1	FEATURE BASED ABSTRACTION AND MESHING
CA 3170049 C	"EVENT PREDICTION (fr)PRÉDICTION D'ÉVÉNEMENT"
IN 525506 B	CONDITION MONITORING SYSTEM AND METHOD
EP 3 790 780 B1	ARRANGEMENT FOR SECURING A RAIL VEHICLE AGAINST THE ACTIONS OF UNAUTHORISED PERSONS
IN 589184 B	METHOD AND CONFIGURATION SYSTEM FOR CONFIGURING A CONTROL DEVICE FOR A TECHNICAL SYSTEM
CN 115918286 B	用于在至少两个装配线上借助于固定装备对电路板进行装配的方法和设备
IN 509416 B	FLAME IONISATION DETECTOR AND METHOD FOR THE ANALYSIS OF AN OXYGEN-CONTAINING MEASURING GAS
US 11,996,348 B2	Semiconductor module assembly having a cooling body and at least one semiconductor module
EP 4 154 067 B1	METHOD AND SYSTEM FOR DETERMINING A COMPRESSION RATE FOR AN AI MODEL OF AN INDUSTRIAL TASK
EP 3 906 522 B1	COMPUTER-BASED METHOD FOR MANAGING ENERGY AND ENERGY MANAGEMENT SYSTEM
CN 112519833 B	转辙机的接点组件的驱动机构、接点组件及转辙机
US 12,541,186 B2	Method for operating a power supply network, computer program and electronically readable data carrier
US 12,355,317 B2	Slot insulation system for an electrical rotating machine, method for producing a slot insulation system
US 12,353,193 B2	Method and apparatus for operating a machine with a tool
KR 102660329 B1	제어 시스템에서의 조작된 클라이언트들의 검출
US 12,065,181 B2	Tamperproof gate mechanism
CN 115023666 B	用于监控电机中传感器的故障防护功能的方法
EP 3 912 883 B1	METHOD FOR CALIBRATING ONE OR MORE ENVIRONMENT SENSORS ARRANGED ON A RAILWAY VEHICLE
IN 479058 B	METHOD AND DEVICE FOR DETERMINING A FAULT IMPEDANCE
CN 112513831 B	在数字时间序列数据中施行范围搜索的方法和计算机化设备
CN 113294088 B	反扭矩释放方法及装置

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 173 922 B1	PASSENGER RAIL VEHICLE
CN 112091964 B	生成用于工业涂布的机器人程序的方法和系统
CN 114430323 B	技术设施中的证书管理
AU 2023367442 B2	SWITCH MACHINE STATE INDICATOR
EP 3 841 732 B1	METHOD, COMPUTER SYSTEM AND A COMPUTER PROGRAM FOR AUTOMATICALLY PROCESSING DATA LABELS
EP 4 403 434 B1	SLIDING DOOR FOR THE INTERIOR OF A RAILWAY VEHICLE WITH RETRACTABLE COVER
EP 4 530 858 B1	METHOD FOR THE COMPUTER-AIDED EXECUTION OF A TECHNICAL PROCESS IN PROCESSING UNITS
US 12,368,779 B2	Method of communicating with a microservice in an industrial facility
DE 10 2017 221 937 B4	Anordnung zur elektrischen Überwachung des Schaltzustandes einer Schmelzsicherung
EP 3 930 857 B1	BELLOWS, VEHICLE AND RAIL VEHICLE
CN 115917464 B	监控工业设备的方法及装置
CN 115145188 B	用于运行自动化系统的方法、自动化系统和控制系统
US 12,413,537 B2	Scheduling transmissions through a telecommunication network
EP 3 997 528 B1	SYSTEM, DEVICE AND METHOD FOR TESTING AUTONOMOUS VEHICLES
US 12,003,525 B2	Development security operations on the edge of the network
IN 552575 B	PLUG-IN SUMMATION CURRENT TRANSFORMER MODULE, RAIL-MOUNTED DEVICE, AND ASSEMBLY METHOD
EP 4 197 845 B1	METHOD FOR CONTROLLING THE DRIVE OF A RAIL VEHICLE
EP 4 295 217 B1	IDENTIFYING A PLACE OF INTEREST ON A PHYSICAL OBJECT THROUGH ITS 3D MODEL IN AUGMENTED REALITY VIEW
US 11,875,158 B2	Automation system and a method for injecting transactional services in automation
CN 112134493 B	电机起动器和用于起动电动机的方法
US 12,218,790 B2	System and method for exchanging data between a server and a client in an industrial data network
US 12,372,604 B2	Radio performance fingerprint based sensor management
US 12,032,463 B2	Data monitor
EP 4 155 160 B1	SUPPLY CONNECTION FOR A WHEEL STEERING DEVICE, WHEEL STEERING DEVICE FOR A CHASSIS, AND CHASSIS
JP 7836423 B2	ヒューリスティックに基づくロボット把持
EP 4 505 254 B1	COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR ANOMALY DETECTION
EP 4 271 968 B1	AN ELECTROMAGNETIC FLOWMETER WITH A PLURALITY OF COILS
CN 119213438 B	用于等离子体诱导损伤避免的基于路径的层堆叠连接检查
EP 3 847 516 B1	CONTROL DEVICE IDENTIFICATION IN AN AUTOMATED SYSTEM
EP 3 756 021 B1	FLEXIBLE ISOMETRIC DECOMPRESSOR ARCHITECTURE FOR TEST COMPRESSION
CN 113412477 B	用于测试和验证应用程序的系统和方法
IN 471718 B	CONTROLLER CLUSTER AND METHOD FOR OPERATING THE CONTROLLER CLUSTER
CN 112567302 B	过程控制单元和用于在过程间交换过程变量的方法
EP 3 967 066 B1	METHOD, MOBILE RADIO TERMINAL, NETWORK ACCESS NODE AND COMPUTER PROGRAM PRODUCT FOR CONFIGURING A RADIO CONNECTION
EP 4 337 500 B1	CAMERA CLEANING DEVICE
US 12,327,992 B2	Circuit breaker device and method
US 11,828,384 B2	Method for operating a valve, associated electronic control unit, and valve drive
JP 7369104 B2	システムオンチップのためのアドレス指定メカニズム
US 12,546,350 B2	Metal corner connector
EP 4 503 254 B1	SYSTEM AND METHOD FOR MEASURING THE ENTROPIC HEAT COEFFICIENT OF A BATTERY
EP 4 059 761 B1	VEHICLE AND METHOD FOR OPERATING A VEHICLE
US 12,153,413 B2	Virtual sensor on a higher-level machine platform
CN 113359591 B	确定和/或选择安全状态的方法和安全相关控制装置
CN 113311739 B	冗余设计的自动化系统
AT 526680 B1	Luftdüse
EP 4 128 003 B1	CONSENSUS METHOD FOR A DISTRIBUTED DATABASE
US 11,977,370 B2	System and method for minimizing non-productive idle times within an automation process
US 12,124,864 B2	Method and system for simulating a robotic program of an industrial robot
DE 10 2020 201 401 B4	Messvorrichtung zur Ermittlung der Fahrdrahtlage
US 12,060,093 B2	Odometric method, in particular for a rail vehicle or a control center
IN 514932 B	SYSTEM AND METHOD FOR THE PROTECTED TRANSMISSION OF DATA
US 11,942,926 B2	Protection of a semiconductor switch

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 042 172 B1	METHODS AND SYSTEMS FOR ASSESSING PRINTED CIRCUIT BOARDS
US 12,101,255 B2	Communication system, coupling communication device and method for transmitting time-critical data
CN 115053209 B	用于在工程系统中生成工程图的方法和系统
CN 115026393 B	工具中心点校验系统、方法、装置及存储介质
CN 111857058 B	用于监控多轴运动系统的轴的加速度的方法和设备
CN 115249978 B	风力发电机的控制方法、变流器、控制系统和存储介质
EP 3 921 710 B1	METHOD FOR AUTOMATICALLY INTERPRETING A PIPE LAYOUT
US 12,381,438 B2	Electric motor and rail vehicle
IN 514608 B	PROVISIONING OF SOFTWARE APPLICATIONS ON EDGE DEVICES IN AN INTERNET-OF-THINGS ENVIRONMENT
CN 112562004 B	图像映射参数生成方法、装置和计算机可读介质
EP 3 796 649 B1	AUGMENTED REALITY METHOD FOR SIMULATING WIRELESS SIGNAL, AND APPARATUS
BR 112020009042 B1	DISPOSITIVO A BORDO PARA A LEITURA DE UM TELEGRAMA DE UM FAROL ELETRÔNICO, VEÍCULO GUIADO E MÉTODO PARA PROTEGER CONTRA DIAFONIA UM DISPOSITIVO A BORDO CONFIGURADO PARA LER UM TELEGRAMA DE UM FAROL ELETRÔNICO
EP 4 126 625 B1	RAIL VEHICLE HAVING A COMPRESSOR
EP 4 205 047 B1	QUALITY ASSURANCE METHOD FOR AN EXAMPLE-BASED SYSTEM
US 11,799,864 B2	Computer systems for regulating access to electronic content using usage telemetry data
US 12,301,064 B2	Method for determining an air gap between a transport rotor and a stator segment aided by an automation device
EP 3 753 800 B1	INPUT METHOD FOR SAFETY-CRITICAL CONTROL COMMANDS AND CONTROL SYSTEM
CN 111386503 B	用于一个或多个机电系统的诊断和寿命预测的系统、方法和控制单元
EP 4 275 228 B1	SEMICONDUCTOR MODULE ASSEMBLY COMPRISING A HEAT SINK AND AT LEAST ONE SEMICONDUCTOR MODULE
US 12,602,028 B2	Systems and methods for enabling trusted on-demand distributed manufacturing
AU 2023426846 B2	CONTAINER IN A MACHINE ROOM OF A RAIL VEHICLE
CN 113383494 B	电开关
CN 117018955 B	酒勾调系统和酒勾调方法
CN 115769162 B	用于在过程技术设施中进行错误原因分析的方法和系统
AT 526457 B1	Akkumulatorengehäuse für ein Schienenfahrzeug
US 11,763,695 B2	Method for computer-implemented simulation of radar raw data
US 11,988,998 B2	Method and apparatus for computer aided simulation of a modular technical system
EP 4 202 724 B1	SYSTEM AND METHOD FOR WRITING AND RETRIEVAL OF DATA IN A DISTRIBUTED LEDGER
CN 113015976 B	针对拓扑优化中的设计域的主动区域适应
EP 3 563 269 B1	HEAT SINK SUPPORT STRUCTURES IN ADDITIVE MANUFACTURING
EP 4 175 236 B1	METHOD AND IOT-DATA SINK DEVICE FOR MANAGING NETWORK STRUCTURE CHANGES OF AN IOT-NETWORK WITH AT LEAST ONE IOT-DATA SOURCE DEVICE
US 11,894,945 B2	Control device for a building automation system having name resolution management
CN 116113897 B	用于监测铣床的方法和设备
IN 585474 B	ARRANGEMENT AND METHOD FOR DETERMINING THE OPERATIONAL PERFORMANCE OF A ROTATING ELECTRIC MACHINE
CN 112384924 B	产品性能预测模型的建立方法和装置、计算机设备、计算机可读存储介质、产品性能预测方法及预测系统
EP 4 060 947 B1	AUTHENTIFICATION OF A NODE IN A COMMUNICATION NETWORK OF AN AUTOMATION SYSTEM
CN 112074834 B	用于运营技术系统的分析装置、方法、系统和存储介质
EP 4 430 313 B1	DEVICE FOR VIBRATION-DAMPED FASTENING OF A WORKPIECE
EP 4 122 654 B1	PREDICTION MODEL LEARNING METHOD, APPARATUS AND SYSTEM FOR AN INDUSTRIAL SYSTEM
EP 4 625 894 B1	DEVICE FOR CONNECTING A COMMUNICATION DEVICE TO A 2-WIRE OR AN 8-WIRE ETHERNET COMMUNICATION SYSTEM AND COMMUNICATION DEVICE
AT 526590 B1	Stromabnehmer für ein Schienenfahrzeug und Schienenfahrzeug
US 11,885,708 B2	Method for determining a remaining useful life of a bearing
EP 4 620 752 B1	SYSTEM AND METHOD FOR INITIATING AN EMERGENCY BRAKE OF A GUIDED VEHICLE
IN 584142 B	METHOD FOR COMPUTER-ASSISTED OPERATION OF A MEMORY UNIT AND EXECUTION OF APPLICATION PROGRAMS HAVING MEMORY CHECKING FOR MEMORY ERRORS
EP 4 147 423 B1	DATA TRANSMISSION ON A BUS SYSTEM
BR 102021019213 B1	MÉTODO, DISPOSITIVO E SISTEMA PARA RECONHECER UMA OSCILAÇÃO ELÉTRICA EM UM SISTEMA DE FORNECIMENTO DE ENERGIA ELÉTRICA
EP 4 295 514 B1	DETERMINING A RESIDENCE TIME IN A PORTION OF A NETWORK
US 12,443,660 B2	Gateway and method for transforming a description of an industrial process equipment into a data information model

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 465 139 B1	EARLY ALERT METHOD AND APPARATUS, PROCESS INSTRUMENT COMPRISING EARLY ALERT APPARATUS, AND COMPUTING DEVICE
EP 3 859 185 B1	METHOD FOR DETERMINING FRICTION STATES FOR A BRAKE
CN 114253766 B	运行冗余的自动化系统的方法
CN 112034274 B	用于测试连接到总线系统的多个信号器的方法以及信号器
EP 3 941 796 B1	RAIL VEHICLE HAVING AN UNDERCARRIAGE FOR RECEIVING SUPPLY LINES
EP 4 389 559 B1	RAILWAY VEHICLE SYSTEM WITH GHOST TRAIN DETECTION, AND OPERATING METHOD
IN 547511 B	CREATION OF A BLOCKCHAIN WITH BLOCKS COMPRISING AN ADJUSTABLE NUMBER OF TRANSACTION BLOCKS AND MULTIPLE INTERMEDIATE BLOCKS
US 11,979,015 B2	Circuit breaker device, circuit breaker system and method
EP 3 871 394 B1	CREATION OF A BLOCKCHAIN WITH BLOCKS COMPRISING AN ADJUSTABLE NUMBER OF TRANSACTION BLOCKS AND MULTIPLE INTERMEDIATE BLOCKS
CN 113255279 B	用于电路设计和验证的寄生提取自动化中基于机器学习的分类
EP 4 138 032 B1	PREDICTING A QUALITY OF A PRINTED CIRCUIT BOARD ASSEMBLY FROM PRODUCTION DATA
CH 720557 B1	Überwachte Stromversorgungseinheit, insbesondere zur Speisung von Komponenten eines Brand- oder Gefahrenmeldesystems
EP 4 049 888 B1	COOLING DEVICE FOR A CAR BATTERY
EP 3 723 012 B1	LIGHTING SYSTEM WITH USAGE MODELING
EP 3 912 881 B1	MONITORING ASSEMBLY AND METHOD FOR MONITORING A TRACK MAGNET
EP 3 741 027 B1	SWITCHING STATION OF HIGH-VOLTAGE OR MEDIUM-VOLTAGE EQUIPMENT
CN 113796001 B	磁片堆栈、用于制造磁片堆栈的方法和电机
CN 114476267 B	泡罩包装机的冲裁步进控制方法以及泡罩包装机
CN 116982121 B	包含固体绝缘材料和浸渍树脂的绝缘系统
EP 3 582 928 B1	SOLDER PREFORM FOR ESTABLISHING A DIFFUSION SOLDER CONNECTION AND METHOD FOR PRODUCING A SOLDER PREFORM
CN 114902146 B	用于参数化设施模型的方法和系统
EP 4 323 160 B1	AUTOMATED MANUFACTURING MACHINE CALIBRATION
AU 2023313982 B2	DEVICE AND METHOD FOR RESPONDING TO LOSS-OF-BRAKE ON A RAILROAD CROSSING GATE MECHANISM
IN 455596 B	RANDOMIZED REINFORCEMENT LEARNING FOR CONTROL OF COMPLEX SYSTEMS
US 12,643,773 B2	Telescopic strut for a device for lifting loads
CN 115479136 B	阀组件
CN 114402329 B	一种用于从基于块的仿真模型中的被仿真的技术组件以计算机实施的方式生成状态机的方法
US 12,030,532 B2	Running gear for a rail vehicle
EP 4 228 385 B1	COMPUTER-IMPLEMENTED METHOD FOR DETERMINING AN OPTIMAL ALLOCATION OF COMPONENT TYPES TO AN ASSEMBLY LINE SELECTED WITH REGARD TO ITS LOADING PERFORMANCE
EP 3 871 945 B1	HALL SENSOR FAULT DETECTION AND MOTOR
CN 116980251 B	故障检测系统、故障检测方法和CAN总线设备
AT 528742 B1	Spurgebundenes Fahrzeug
EP 3 627 258 B1	MOTION PLANNING FOR A SERVO PRESS
EP 3 713 188 B1	METHOD AND APPARATUS FOR DATA TRANSMISSION BETWEEN TWO NETWORKS
EP 3 987 725 B1	BUILDING AUTOMATION SYSTEM FOR CONTROLLING CONDITIONS OF A ROOM
CN 116686175 B	编码器的出线结构及编码器
EP 3 684 641 B1	MEASURING DEVICE AND METHOD FOR MEASURING ELECTRICAL ENERGY TRANSFERRED FROM A CHARGING STATION
EP 4 124 537 B1	METHOD FOR MANUFACTURING A MODULAR ROOF ASSEMBLY FOR A RAIL VEHICLE BODY
US 12,488,455 B2	Monitoring a flux application
US 12,565,994 B2	Power output determination by way of a fuel parameter
CN 114846488 B	基于物料流的生产过程计划和编程方法、装置和系统
US 12,160,177 B2	Circuit arrangement for a resonant converter
SG 11202260567 B	METHOD AND ARRANGEMENT FOR SEPARATING EXCESS MATERIAL FROM AN ADDITIVELY MANUFACTURED COMPONENT
CN 112020683 B	自动化组件配置
DE 10 2023 209 404 B3	Computer-implementiertes Verfahren, Computerprogrammprodukt und Kommunikationssystem zum Übertragen von Daten
IN 457664 B	CONTROL VALVE
CN 110059070 B	将数据从数据源收集到制造运营管理数据仓库
EP 4 300 893 B1	DEVICE AND METHOD FOR COUPLING A DEVICE NETWORK AND A COMMUNICATION NETWORK AND AUTOMATION SYSTEM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,439,565 B2	Heat sink assembly and power converter assembly
US 12,142,907 B2	Overcurrent protection device for protecting a consumer arranged in a DC grid
CN 111356986 B	用于相互地集成应用程序特别是Web应用程序的方法
US 11,853,048 B2	Control method and device that resolves closed loops in automatic fault tree analysis of a multi-component system
EP 3 852 256 B1	A SELF-CALIBRATION METHOD FOR SELF-POWERED SINGLE CT CURRENT SENSOR
US 12,499,749 B2	False alarm detection and diagnostics
EP 4 143 717 B1	PRIVACY PRESERVING UNIDIRECTIONAL COMMUNICATION DEVICE
CN 114026564 B	确定轴承状况的系统、装置和方法
CN 113161171 B	开关装置的连接结构
KR 102662252 B1	자동화 목적들을 위한 데이터 모델을 타겟 온톨로지로 변환하기 위한 방법
EP 3 612 802 B1	ULTRASONIC TYPE FLOW MEASURING DEVICE
CN 114119914 B	修改有限元网格
US 11,824,336 B2	Outdoor busway system having protected conductor sections
US 12,580,492 B2	Power converter with color-anodized aluminum busbars, and method for producing such a power converter
EP 4 552 155 B1	ARRANGEMENT WITH AT LEAST ONE PASSIVE COMPONENT
EP 3 873 034 B1	METHOD AND SYSTEM FOR DETECTING DATA TRAFFIC IN A COMMUNICATION NETWORK
EP 4 088 077 B1	METHOD AND DEVICE FOR DETERMINING FOULING IN A HEAT EXCHANGER
US 12,037,032 B2	Method for detecting systematic deviations during determination of a movement variable of a ground-based, more particularly rail-based, vehicle
EP 4 070 353 B1	SENSING A SWITCHING STATE OF AN ELECTROMECHANICAL SWITCHING ELEMENT
CN 119816717 B	用于通过故障检测模型提供轴承的物理可解释故障信息的方法
CN 112805642 B	用于远程管理工业机器的配置的系统和方法
IN 595799 B	A METHOD FOR GENERATING TRAINING DATA FOR A NEURAL NETWORK FOR PREDICTING A CONCENTRATION OF POLLUTANTS
CN 115001995 B	用于处理从站信息的方法、设备和机器可读存储介质
CN 112189307 B	金属氧化物半导体场效应晶体管的驱控
CN 114175437 B	具有集电器的车辆
EP 3 545 440 B1	SYSTEMS AND METHODS TO SEMANTICALLY COMPARE PRODUCT CONFIGURATION MODELS
CN 114846837 B	传输速率适配
CN 111581765 B	增材三维（3D）芯设计
CN 113366432 B	跨多个层动态部署MOM模块
US 11,845,343 B2	Device and method for controlling a current collector for a vehicle
US 12,174,224 B2	Current measuring device with hall sensors
US 12,085,485 B2	System and a method for analyzing the motions of a mechanical structure
EP 4 185 962 B1	VALIDATING A SOFTWARE-DRIVEN SYSTEM BASED ON REAL-WORLD SCENARIOS
EP 3 974 284 B1	METHOD FOR REPRESENTING AUGMENTED REALITY AND DEVICES FOR APPLYING THE METHOD
US 12,358,768 B2	Load-compensating device for a lifting application with an object to be lifted or lowered
US 12,473,747 B2	Lock body, pin lock and command device
EP 4 374 406 B1	CONTACT DISC FOR VACUUM SWITCH, VACUUM SWITCH AND METHOD OF MANUFACTURING A CONTACT DISC
CN 115989498 B	用于在计算机辅助设计环境中生成多厚度对象的三维模型的方法和系统
EP 3 983 862 B1	METHOD, DEVICE AND SYSTEM FOR CONTROLLING AUTONOMOUS VEHICLES
CN 112753088 B	快速触发的锁定件、触发机构和快速接地器、快速开关或短路器
US 12,407,507 B2	Method for data transfer and communication system
CN 111108483 B	用于识别原始程序中的弱点的方法、设备和测试程序
US 12,117,822 B2	Method and system for managing alarms in modular production installations
EP 4 021 777 B1	RAILWAY VEHICLE AND PROCEDURE FOR ITS OPERATION
CN 113119662 B	具有车轮的车轮模块的制动模块以及车轮模块
EP 3 844 618 B1	ORCHESTRATION OF CONTAINERIZED APPLICATIONS
CN 116594449 B	基于夹套的罐温控制方法及装置
EP 3 974 279 B1	VEHICLE WITH FUEL CELL SYSTEM AND SANITARY CELL
US 12,669,808 B2	Operating method and operator-supporting control system for a technical plant
US 12,474,990 B2	Hardware-based sensor analysis
CN 114730170 B	加工期间的在线多力适配

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 173 019 B1	RESIDUAL CURRENT FAULT INDICATOR MECHANISM AND CIRCUIT BREAKER WITH RESIDUAL CURRENT FAULT INDICATOR MECHANISM
US 12,488,580 B2	Method and system for identifying objects
CN 113383242 B	基于慢时钟信号的多重捕获全速扫描测试电路
IN 503803 B	SENSOR DEVICE
CN 111670470 B	尤其是为了操控建筑物中的房间操作元件而提供基于语音的服务的方法和系统
CN 115918036 B	总线系统上的数据传输
EP 4 062 592 B1	REMOTE ACTIVATION OF THE WIRELESS SERVICE INTERFACE OF A CONTROL DEVICE USING A PERIPHERAL DEVICE
US 11,824,535 B2	Fail-safe counter evaluator to insure proper counting by a counter
CN 116274598 B	冲切转运一体机及零件供给系统
EP 3 834 270 B1	BATTERY ARRANGEMENT FOR THE AUXILIARY OPERATION OF A RAIL VEHICLE
CN 111869250 B	用于授权网络节点的通信的方法和系统
US 11,846,561 B2	Determining the transmission quality of an optical unit in a camera system
EP 4 043 975 B1	COMPUTER-IMPLEMENTED METHOD FOR DETERMINING AT LEAST ONE QUALITY ATTRIBUTE FOR AT LEAST ONE DEFECT OF INTEREST
CN 111630535 B	用于动态地优化工业生产过程的方法和装置
EP 4 434 842 B1	CLADDING COMPONENT WITH BREAK-OFF LINE
AT 528583 B1	Federungseinrichtung für ein Schienenfahrzeug
CN 114986250 B	电池极片切割设备的步进控制方法以及步进控制系统
IN 588091 B	SYSTEM AND METHOD FOR AUTO-TAGGING BMS POINTS
AT 526545 B1	Stromversorgungseinrichtung, Stromversorgungsanordnung, Fahrzeug und Rückholverfahren
EP 3 797 058 B1	OPERATING METHOD FOR VEHICLES WITH THE FORMINGATION OR CONFIGURING OF A COMMUNICATIONS CONNECTION AFTER THE COUPLING PROCESS
CN 116097556 B	变流器的容错运行
EP 3 925 853 B1	A SYSTEM AND METHOD FOR DETECTING ERRONEOUS LOCATION DATA REPORTED BY A TRAIN
US 12,614,943 B2	Electrical operating means having an insulation system, and method for producing the insulation system
KR 102592071 B1	수치 시계열 데이터에서 범위 검색을 수행하기 위한 방법 및 컴퓨터화된 디바이스
US 12,569,985 B2	Runtime assessment of suction grasp feasibility
EP 3 883 116 B1	VEHICLE, IN PARTICULAR RAIL VEHICLE
CN 114375586 B	经由两个或多个网络传输数据报的方法和网关设备
US 11,816,974 B1	Fire safety device address and location verification
US 12,026,483 B2	Programming marking method, processor, terminal, and computer program product
CN 114649170 B	具有热触发单元的电气开关和用于适配热触发曲线的方法
US 12,160,917 B2	Network device for connecting a plurality of industrial devices
EP 4 002 676 B1	METHOD FOR OPERATING A THREE-PHASE MOTOR
IN 527616 B	METHOD AND ARRANGEMENT FOR ASSIGNING THE SPATIAL POSITION TO A DEVICE
EP 4 527 159 B1	POWER MODULE, ELECTRICAL DEVICE AND METHOD FOR PRODUCING A POWER MODULE
EP 4 165 502 B1	COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR DYNAMICALLY EXECUTING AN APPLICATION PROGRAM THROUGH A PLATFORM
EP 3 789 780 B1	METHOD TO PERFORM HARDWARE SAFETY ANALYSIS BASED ON A STRUCTURAL ANALYSIS AND CONES OF INFLUENCE
EP 4 107 522 B1	COMPUTER-ASSISTED METHOD FOR GENERATING TRAINING DATA FOR A NEURAL NETWORK FOR PREDICTING A CONCENTRATION OF POLLUTANTS AT A MEASURING STATION
US 12,488,852 B2	Read-only memory diagnosis and repair
JP 7509565 B2	命令実行のトレース
CN 112955891 B	区块形成装置和区块形成方法、节点装置和区块确认方法
EP 3 814 189 B1	I-BEAM FOR A RAIL VEHICLE CAR BODY
US 12,424,825 B2	Load management for an electrical panel
US 12,506,332 B2	DC solid-state circuit breaker with a solid-state aided airgap that provides a fail-safe mechanism
EP 4 342 260 B1	A METHOD OF COMMUNICATING BETWEEN A FIRST RADIO UNIT AND A FIRST DISTRIBUTED UNIT
EP 4 443 777 B1	METHOD FOR SYNCHRONIZING INTELLIGENT ELECTRONIC ENTITIES IN A LOCAL AREA NETWORK
EP 4 379 617 B1	ASSESSMENT OF INPUT-OUTPUT DATASETS USING NEIGHBORHOOD CRITERIA IN INPUT SPACE AND OUTPUT SPACE
BR 102021022196 B1	MÉTODO PARA OPERAR UM MOTOR TRIFÁSICO DE GAIOLA,DISPOSITIVO DE ARRANQUE SUAVE, PRODUTO DE PROGRAMADE COMPUTADOR, E, MEIO LEGÍVEL POR COMPUTADOR
GB 2633067 B	Dynamic rail vehicle characteristic measurement system and method

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 500 281 B1	METHOD FOR DETERMINING A CONTROLLER CONFIGURATION FOR A DRIVE SYSTEM, DEVICE AND DRIVE SYSTEM
EP 4 454 971 B1	BALISE HOUSING WITH A RECEIVING STRUCTURE FOR ELECTRONIC FUNCTIONAL COMPONENTS
US 12,492,920 B2	Capacitive reading device for a pointer instrument
US 12,229,486 B2	Method for determining set-up families for a pick-and-place line for populating circuit boards with electronic components
US 11,958,515 B2	Method and apparatus for identifying properties of a vehicle, computer program product and computer-readable medium for storing and/or providing the computer program product
IN 491003 B	INTERIOR ANGLE FORMED BY ALTERNATING PRINTING TECHNIQUES
CN 113015942 B	数据分析的方法、装置和系统
SG 11202203024 B	DIAGNOSIS OF TECHNICAL SYSTEMS
CN 113196274 B	根据材料属性的自定义元胞晶格核的计算机辅助设计
EP 4 213 175 B1	LOW VOLTAGE CIRCUIT BREAKER WITH VOLTAGE TAP AND PCB CARD AND METHOD OF ASSEMBLY
EP 4 148 754 B1	DEVICE FOR MONITORING A POWER CAPACITOR AND ADAPTER FOR SUCH A DEVICE
US 12,024,210 B2	Drive controller of a rail vehicle
US 12,683,364 B2	ARC-resistant switch gear enclosure door latch and sealing mechanisms of a switch gear
US 11,999,393 B2	Arrangement for monitoring exterior regions of a rail vehicle
CN 113243014 B	网络设备的通信模型的建立方法及装置
EP 4 585 858 B1	COMBUSTION DEVICE WITH ADAPTIVE ELECTRONIC COMPOSITE
CN 113330376 B	基于高质量几何体的碰撞检查
US 12,113,352 B2	Protection apparatus for a load resistor, and method for operating such a protection apparatus
CN 113189389 B	一种电流传感器单元和电流检测电路
EP 4 294 695 B1	RAIL VEHICLE HAVING CENTRAL BUFFER COUPLING
US 12,683,406 B2	Multi-throw or multi-pole switching systems and methods for providing modular switching combinations for enabling flexible home energy management
US 12,407,595 B2	Method of capturing packets from applications hosted on containers
CN 114270403 B	用于检索多光谱BRDF参数的计算机实施的方法和系统
EP 3 996 967 B1	RAIL RECOGNITION USING LIDAR
IN 564825 B	CONTROL DEVICE FOR CONTROLLING A TECHNICAL SYSTEM, AND METHOD FOR CONFIGURING THE CONTROL DEVICE
EP 3 669 278 B1	METHOD AND DEVICE FOR A UNIDIRECTIONAL AND INTEGRITY-PROTECTED SYNCHRONIZATION OF LOG DATA
US 12,176,169 B2	Circuit interrupting device for providing a fail-safe lock out trip mechanism or a temperature activated, permanent lock out trip mechanism in response to a self-test
DE 10 2023 205 522 B3	Vorrichtung und Verfahren zum Transportieren eines Ladekabels zum Laden eines Fahrzeugs
KR 102584309 B1	에너지 시스템의 컴포넌트들 사이의 에너지 흐름들을 제어하기 위한 디바이스 및 방법
CN 115203360 B	用于在工业数据网络中的服务器与客户端之间交换数据的系统和方法
CN 113825980 B	机器人手眼标定方法、装置、计算设备以及介质
US 12,212,240 B2	Method for actuating a buck-boost converter
EP 4 591 425 B1	METHOD FOR CONTROLLING A LINEAR MOTOR-BASED TRANSPORT SYSTEM AND TRANSPORT SYSTEM
EP 4 211 780 B1	SERVO DRIVE HAVING AN ELECTRIC MOTOR AND AN ELECTROMAGNET ARRANGED MOVABLY ON THE ROTOR OF THE ELECTRIC MOTOR TO APPLY A HOLDING TORQUE WITH CONTACT VIA A REMANENT MAGNETIC FIELD
DE 10 2023 209 633 B3	Verfahren zum Betreiben eines Schalters, Schalter und Computerprogramm
EP 4 118 619 B1	POSE ESTIMATION METHOD AND APPARATUS
EP 4 431 956 B1	MEASUREMENT OF A PARTIAL DISCHARGE OF AN ELECTRICAL OPERATING MEANS
IN 585601 B	TEMPERATURE BASED FLUID LEVEL ESTIMATION IN AN ELECTRICAL DEVICE
EP 3 769 409 B1	CONTROL OF A METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR
CN 114424133 B	用于过程数据的可视化方法、可视化系统和存储介质
EP 3 643 455 B1	METHOD AND SYSTEM FOR PROGRAMMING A COBOT FOR A PLURALITY OF INDUSTRIAL CELLS
EP 4 345 433 B1	SWITCHGEAR DEVICE
US 12,444,671 B2	Semiconductor component with damped bonding surfaces in a package with encapsulated pins
CN 114365089 B	用于容器虚拟化计算设备中的过载保护的方法
US 12,122,432 B2	Snow protection assembly for a coupling region of a rail vehicle
EP 4 463 348 B1	CHASSIS FOR RAIL VEHICLES
CN 116685920 B	用于对生产设施的数据进行无线电传输的方法和系统
EP 3 832 823 B1	METHOD AND DEVICES FOR GENERATING SOIL RELATED INFORMATION
CN 111880506 B	计算机辅助地处理自动化设施中的状态消息的方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 602 715 B1	SYSTEM, METHOD AND A COMPUTER PROGRAM PRODUCT FOR AN IMPROVED FAULT ANALYSIS IN AN ELECTRICAL POWER SYSTEM
US 11,908,130 B2	Apparatuses and methods for digital pathology
US 12,609,256 B2	Direct current solid-state airgap with parallel multi-throw switch
CN 115877700 B	过程控制方法及装置
EP 4 162 332 B1	DEVICE AND METHOD FOR MACHINING A WORKPIECE
EP 3 918 500 B1	MACHINE LEARNING-BASED ANOMALY DETECTIONS FOR EMBEDDED SOFTWARE APPLICATIONS
EP 3 802 165 B1	VEHICLE AND OPERATING METHOD FOR A VEHICLE
EP 3 786 026 B1	RAILWAY SYSTEM AND METHOD FOR CONTROLLING SAME
US 12,674,883 B2	Radio locating system, transponder and method for operating the radio locating system
JP 7577645 B2	人工知能計算装置、制御方法および制御装置、エンジニアステーションおよび産業オートメーションシステム
EP 3 895 956 B1	METHOD AND SYSTEM FOR MANAGING GUIDED VEHICLE TRAFFIC OVER A RAILWAY NETWORK
CN 115552844 B	用于作为私人网络与公共网络之间的单向通信连接来操作的数据采集装置和方法
EP 3 696 733 B1	ENCODING AND TRANSFERRING SCENE AND TASK DEPENDENT LEARNING INFORMATION INTO TRANSFERABLE NEURAL NETWORK LAYERS
EP 4 016 576 B1	ELECTRICAL SWITCHING DEVICE FOR MEDIUM AND / OR HIGH VOLTAGE APPLICATIONS
US 12,353,773 B2	Method for computer-assisted operation of a memory unit and execution of application programs having redundant data storage
US 12,316,777 B2	Method for issuing a cryptographically protected certificate of authenticity for a user
KR 102669491 B1	원격 지원을 위한 방법 및 디바이스
CN 110739754 B	利用废热的燃料电池装置
KR 102667931 B1	애플리케이션 프로그램 구성 방법, 실행 방법, 컴퓨팅 디바이스, 및 저장 매체
EP 3 968 213 B1	METHOD AND DEVICE FOR DETERMINING A TRACK-BOUND RAIL PATH IN A TRACK SYSTEM
CN 114207663 B	工具的磨损程度的确定
US 12,657,038 B2	Measurement error reduction in a process bus system
EP 4 179 399 B1	A METHOD, DEVICE, SYSTEM AND STORAGE MEDIUM FOR FAULT DIAGNOSIS AND SOLUTION RECOMMENDATION
EP 3 959 031 B1	COMPONENT ARRANGEMENT AND METHOD FOR THE PRODUCTION THEREOF
EP 4 312 473 B1	MODULAR AUTOMATION SYSTEM
US 12,429,164 B2	Monitoring facility and method for monitoring an opening
CN 116583418 B	用于在轨道车辆中传递纵向力的装置
US 12,694,358 B2	Methods, systems, apparatus, electronic devices, and storage media for evaluating work tasks
CN 114202715 B	训练神经网络来识别工具状态的方法和相关方法以及设备
US 12,657,360 B2	Digital design simulation accelerator
CN 113013000 B	远程驱动器和参数给定方法
CN 114503048 B	具有两个并联连接的输送元件的输送装置
US 12,504,746 B2	Machine and method for manufacturing a workpiece by a computer-controlled manufacturing machine with an optimal tool configuration
US 12,422,932 B2	Actuation device for a public transport vehicle
EP 3 774 482 B1	RAIL VEHICLE FOR TRANSPORTING PASSENGERS
EP 3 756 970 B1	TRACK-BOUND VEHICLE AND METHOD FOR OPERATING THE SAME
CN 110971132 B	模块化多电平换流器的控制系统、方法、装置和子模块
CN 114365136 B	用于校准生产线的仿真模型的方法和装置
US 12,554,886 B2	Computer-implemented method and system to govern status check of at least one hyperlink in preservation of user's anonymity of the accessed hyperlink
EP 4 136 937 B1	BRAKING RESISTOR AND VEHICLE EQUIPPED WITH SAME
CN 115733573 B	用于配置网络设备的多个PTP端口的系统和方法
US 12,032,892 B2	Semiconductor layout context around a point of interest
EP 4 282 062 B1	BI-DIRECTIONAL POWER CONVERTER
IN 563562 B	ARTIFICIAL INTELLIGENCE COMPUTING DEVICE, CONTROL METHOD AND APPARATUS, ENGINEER STATION, AND INDUSTRIAL AUTOMATION SYSTEM
EP 3 824 359 B1	PROJECTING, CONFIGURING AND MAINTENANCE OF A DRIVE DEVICE
US 12,377,508 B2	Method for operating a machine tool, computer program product, control unit, machine tool, simulation program product and use of the control unit
US 12,542,477 B2	Power converter
EP 3 562 089 B1	AUTOMATED CERTIFICATE MANAGEMENT

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,928,689 B2	Deleting transactions from a distributed ledger
EP 3 506 143 B1	INTERFACE FOR A HARDWARE SECURITY MODULE
US 12,212,233 B2	Switching device for a DC voltage circuit
CN 114207975 B	用于协调配电网络中保护装置的方法
IN 567189 B	METHOD FOR STARTING AND STOPPING AN ASYNCHRONOUS MOTOR
CN 115211239 B	制造电气装置的方法
US 11,914,934 B2	Active region adaptations for design domains in topology optimizations
EP 4 091 243 B1	ENERGY CONVERTER
US 12,468,786 B2	Checking a license for the usage of at least one performance property in an internet-of-things (IoT) device
DE 10 2018 216 087 B4	Ladestecker und Messsystem
CN 116323434 B	用于实现AGV之间同步的方法和装置
EP 3 874 521 B1	A METHOD AND A SYSTEM FOR SYNCHRONIZING A FIRST AND A SECOND SIMULATION SYSTEM
EP 4 100 293 B1	RAIL VEHICLE WITH FULLY INTEGRATED WHEELCHAIR ZONE
US 11,817,367 B2	Power module
US 12,690,175 B2	Arrangement for cooling a power module, and power module
CN 115461977 B	能量转换器
EP 4 439 202 B1	FAULT DETECTION IN BUILDINGS
US 12,695,293 B2	Circuit-breaker device and method
US 11,906,189 B2	System and method for high ventilation of outdoor air
CN 113365784 B	工件的数控加工的计算机辅助优化
DE 10 2012 013 879 B4	Innenläufermotor
CN 113544605 B	自动配置自动化设备的方法、自动化设备和计算机可读的介质
US 12,676,894 B2	Software defined remote access for zero-trust support
CN 112542817 B	断路器和移动设备
CN 115720658 B	用于物理零件的3D打印的热量感知工具路径重新排序
EP 4 314 980 B1	CONTROL UNIT AND METHOD FOR CONTROLLING OPERATION OF A HEAT GENERATING SYSTEM OF AN ENERGY SYSTEM
EP 4 089 630 B1	METHOD AND ASSEMBLY FOR MEASURING PROGRESS IN THE CONSTRUCTION OF A BUILDING
EP 3 881 245 B1	HARDWARE ACCELERATOR EXTENSION TO TRANSFER LEARNING - EXTENDING/FINISHING TRAINING TO THE EDGE
US 11,796,988 B2	Method and control unit for providing transport data for controlling a goods transport in a production environment, and production environment
CN 112106054 B	供数据传输的三维模型的制备
EP 4 097 604 B1	TRAINING OF DIFFERENTIABLE RENDERER AND NEURAL NETWORK FOR QUERY OF 3D MODEL DATABASE
EP 4 348 361 B1	COMPUTER-IMPLEMENTED METHOD AND ORCHESTRATION SYSTEM TO ORCHESTRATE CONFIGURATIONS OF SIMULATIONS BASED ON DIGITAL TWIN MODELS OF MODULAR PLANTS
EP 3 489 774 B1	AUTOMATED DETERMINATION OF A PARAMETRISATION OF AN EVALUATION METHOD
US 12,136,603 B2	Semiconductor arrangement comprising a semiconductor element, a substrate and bond connecting means
KR 102994472 B1	전자 소자들의 온도들을 결정하기 위한 배열체 및 방법
CN 112415508 B	确定混合比
CA 3152730 C	SYSTEMS AND METHODS TO DETECT DIRT LEVEL OF FILTERS
CN 110785757 B	边缘设备和用于运行边缘设备的方法
GB 2624044 B	Reactor and reaction method
CN 111195906 B	用于预测机器人的运动轨迹的方法和系统
US 12,469,660 B2	Mounting adapter for at least one electrical switch and switch cabinet with a mounting adapter of this type
EP 3 714 505 B1	SENSOR DEVICE AND METHOD FOR ITS OPERATION
JP 7423697 B2	蓄電池の残量値を算定する方法、装置、およびコンピュータプログラム製品
CN 111133434 B	用于受密码保护地运行虚拟机的设备和方法
IN 579691 B	METHOD AND ARRANGEMENT FOR COMMISSIONING AN UPDATED APPLICATION FOR AN INDUSTRIAL AUTOMATION ARRANGEMENT
EP 4 450 981 B1	ARRANGEMENT WITH AN INSULATION MONITORING DEVICE FOR AN UNGROUNDED IT POWER SUPPLY SYSTEM
EP 4 154 139 B1	EXTENDED INTEGRITY MONITORING OF A CONTAINER IMAGE
US 11,804,713 B2	Controlling an energy system using an iteration process for selected buses of the energy system
CN 115812181 B	用于维修工件的方法和装置
CN 113454903 B	运行包括至少两个机械耦合的异步马达的系统的方法

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 889 001 B1	METHOD FOR LOCATING A RAIL VEHICLE AND DEVICES FOR CARRYING OUT THE METHOD
US 11,764,566 B2	Protection circuit
CN 112512858 B	模块化变流器
IN 595553 B	OVERHEAD LINE SYSTEM WITH A SKEWED PARALLEL ZONE
DE 10 2020 212 307 B4	Lotfolie für Vakuumschaltröhren
CN 111512093 B	用于包括空气处理单元和终端单元的HVAC的控制系统及操作该控制系统的方法
CN 111052593 B	在外部控制线上运行的自适应伺服驱动装置和适当的应用
CN 113165174 B	包括可到达性分析的自动化系统
CN 116710856 B	建筑物的配置
EP 4 439 217 B1	COMPUTER-IMPLEMENTED METHOD, COMPUTER PROGRAM PRODUCT AND COMPUTER-IMPLEMENTED DEVICE FOR CONTROLLING THE MOTION OF AT LEAST ONE AGV VIA A FEEDBACK LOOP
EP 3 961 425 B1	SYSTEM AND METHOD FOR PROVIDING ACCESS TO MULTIMODAL CONTENT IN A TECHNICAL DOCUMENT
JP 7846244 B2	技術的設備のための制御システムおよび動作方法
CN 110968050 B	生产模块
EP 4 271 021 B1	METHOD AND GADGET FOR ENABLING A TIME-DUPLEX, SHARED FREQUENCY-BAND OPERATION OF AN INTERMITTENT MOBILE RADIO SYSTEM AND A WIRELESS COMMUNICATION SYSTEM
EP 4 610 125 B1	METHOD FOR PERFORMING A BRAKE TEST DURING TRACK-GUIDED VEHICLE ASSEMBLY AND VEHICLE SUITABLE FOR SAID METHOD
CN 111095139 B	一种用于检测机器的异常状态的方法和系统
EP 4 578 140 B1	SECURE TECHNICAL MODULE
CN 110894882 B	调节阀
KR 102799950 B1	소신호 변성기를 연결하기 위한 범용 측정 입력부 및 그러한 측정 입력부를 가진 전기 장치
US 12,665,882 B2	Gateway and method for operating a gateway
AT 528231 B1	Stromversorgungsvorrichtung, Stromversorgungseinrichtung und Fahrzeug
CN 112311701 B	在片上网络中模拟广播
CN 116134387 B	用于确定工业任务的AI模型的压缩率的方法和系统
JP 7639049 B2	電池用の懸濁液の工業規模での製造方法および装置
KR 102796909 B1	미지의-불안전한 시나리오들을 생성하는 것, 자동화된 차량들을 개선하는 것, 컴퓨터 시스템
EP 3 451 206 B1	METHOD, APPARATUS, AND DEVICE FOR GENERATING A VISUAL MODEL LAYOUT OF A SPACE
US 12,259,722 B2	System and method for predicting failure in a power system in real-time
IN 582070 B	CONTROL OF A TECHNICAL SYSTEM BY MEANS OF A COMPUTING UNIT FOR ARTIFICIAL INTELLIGENCE
US 12,384,431 B2	Systems and methods for train tracking
EP 4 300 882 B1	METHOD FOR SECURE TRANSMISSION OF TIME-CRITICAL DATA WITHIN A COMMUNICATION SYSTEM, COMMUNICATION SYSTEM AND ADAPTER FOR END DEVICE
EP 3 659 239 B1	ELECTRIC MOTOR AND METHOD FOR ASSEMBLING AN ELECTRIC MOTOR
CN 112789957 B	带有单独的内部空间的变流器
US 11,892,831 B2	Extended trend indicator for process data and secondary alarms
EP 3 818 476 B1	NEURAL LOGIC CONTROLLERS
CN 116313591 B	自动连接系统
CN 116210215 B	提供时间关键的服务的方法和系统
US 11,803,784 B2	Sensor fusion for transit applications
US 12,524,964 B2	Modeling method and system for tubular structure, and computer-readable storage medium thereof
US 12,138,806 B2	Machine learning-based environment fail-safes through multiple camera views
EP 4 466 623 B1	METHOD AND SYSTEM FOR PERFORMING AN IT SECURITY TEST
CN 112889208 B	用于监视变流器系统的陷波电路的方法
CN 113348621 B	操作多电平能量转换器的开关元件
US 12,595,773 B2	Combustion apparatus with mass flow sensor
US 12,393,775 B2	Automatic data extraction
CN 114051716 B	配置优先级的方法、云平台、系统、计算设备和介质
US 12,397,662 B2	Battery monitoring method in a rail vehicle
IN 512975 B	DETERMINING STATES OF A DEVICE BY MEANS OF SUPPORT-VECTOR MACHINES
DE 10 2023 200 174 B4	Halbleiterschalter mit Ausfallabsicherung
MX 413791 B	DISPOSICIÓN Y PROCEDIMIENTO PARA PRONOSTICAR LA VIDA ÚTIL RESTANTE DE UNA MÁQUINA
EP 4 117 977 B1	RAILWAY SYSTEM WITH DIAGNOSTIC SYSTEM AND METHOD FOR OPERATING SAME

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 114020493 B	一种数据分享的方法、装置及系统
US 11,914,456 B2	Method and device for securing access to encoded variables in a computer program
EP 4 334 790 B1	A METHOD OF VIRTUALLY INSPECTING A QUALITY OF A PRODUCT
EP 4 072 894 B1	BRAKING RESISTOR AND VEHICLE EQUIPPED WITH SAME
EP 4 150 417 B1	OPERATING METHOD FOR A MACHINE TOOL, COMPUTER PROGRAM PRODUCT, CONTROL UNIT AND MACHINE TOOL
JP 7665732 B2	高速パラレルバス経由の高帯域ＩＪＴＡＧ
US 12,641,347 B2	Method and system for data transmission
AU 2023246473 B2	METHOD FOR ASCERTAINING THE FILL LEVEL OF A PIPE, ANALYSIS UNIT, FLOW MEASURING SYSTEM, AND COMPUTER PROGRAM PRODUCT
EP 3 474 196 B1	METHOD OF SELECTING A PROVER
CN 116472518 B	保护对计算机程序中的编码变量的访问的方法和装置
EP 3 461 005 B1	METHOD AND SYSTEM FOR FREQUENCY CORRECTION FOR A RING OSCILLATOR
DE 10 2022 210 308 B4	Baugruppenmodul einer Niederspannungsschaltanlage und eine Niederspannungsschaltanlage
US 12,399,856 B2	Serial interface for containers
US 12,306,264 B2	Method and apparatus for detecting aging-dictated damage or delamination on components, in particular power modules of power electronic devices, and power electronic device, in particular converter
EP 3 916 748 B1	VOLTAGE TRANSFORMER DISCONNECTOR ARRANGEMENT
EP 4 089 401 B1	MEASURING DEVICE AND METHOD FOR MEASURING AT LEAST TWO DIFFERENT COMPONENTS OF A FLUID USING RAMAN SCATTERING AND CHEMILUMINESCENCE
US 11,978,601 B2	DC network
DE 10 2022 207 371 B4	Schienenfahrzeug mit erhöhter Seitenwindstabilität
US 12,615,255 B2	Method and automation system for an automation device
EP 4 471 439 B1	ENERGY SUPPLY DEVICE, VEHICLE AND METHOD FOR MONITORING A LOSS OF CONTACT OF A MEASURING LINE
US 11,962,569 B2	Hardening a communication device
EP 4 229 667 B1	PROTECTIVE SWITCHING DEVICE AND METHOD
IN 516989 B	VACUUM SWITCH DEVICE FOR A CIRCUIT HAVING A MAIN AND AUXILIARY CURRENT PATH
CN 114503412 B	具有多于两个在输出侧提供的电势的整流器中的钳位电路
EP 3 599 577 B1	METHOD FOR FORECASTING THE DEMAND FOR HARDWARE COMPONENTS
EP 4 133 287 B1	MAGNETIC FIELD SENSOR ASSEMBLY, WHICH IS EVENLY DISTRIBUTED AROUND THE CIRCUMFERENCE, FOR MEASURING A MAGNETIC FIELD OF A CONDUCTOR OF AN ELECTRIC CURRENT
DE 10 2022 210 431 B4	Verfahren zum Schätzen des Schlupfs eines Asynchronmotors
CN 112840601 B	用于配置待命名的装置的方法、装置和计算机可读介质
CN 111656354 B	操作用于对待制造物品建模的CAD系统模型的方法
CN 115917461 B	用于对工件进行表面分析的方法及设备
CN 115413343 B	用于将软件制品从源网络传输至目标网络的方法和IT系统
EP 4 451 070 B1	MONITORING SYSTEM AND METHOD OF ITS OPERATION
EP 4 295 254 B1	METHOD FOR MONITORING CONTAINER APPLICATIONS ON A HOST SYSTEM AND INSTALLATION
JP 7566887 B2	電力分配のための方法及び装置
US 12,322,224 B2	System, device and method for testing autonomous vehicles
EP 4 469 871 B1	ELECTRONICS ASSEMBLY FOR AN AUTOMATION SYSTEM
IN 475562 B	RAIL VEHICLE DOOR
US 12,209,898 B2	Calibration method for a flow measurement system, flow measurement system and computer program product
EP 4 087 766 B1	ARRANGEMENT FOR TESTING ETCS LEVEL 2 FUNCTIONALITIES IN RAIL TRANSPORT
EP 3 567 441 B1	PROCESS CONTROL SYSTEM WITH AN ENGINEERING SYSTEM, AN OPERATOR SYSTEM AND AN ARCHIVE SYSTEM
EP 3 540 755 B1	CIRCUIT BREAKER CIRCUIT CONTACT PROTECTION MECHANISM
DE 10 2023 204 566 B4	Computer-implementiertes Verfahren zum Ermitteln von mindestens einem Standby-Verbrauch von mindestens einem elektrischen Gerät eines technischen Systems
EP 3 916 493 B1	PROGNOSIS OF A STATE OF A TECHNICAL SYSTEM
US 12,005,944 B2	Method and device for diagnosing a railroad switch with a point machine
US 12,438,776 B2	Method and control program for automated configuration of a communication network comprising multiple virtual local area networks
CN 113906280 B	用于操作分配网络的方法和设备
EP 4 099 250 B1	METHOD AND DEVICE FOR DETERMINING QUALITY OF USER EXPERIENCE OF PRODUCTS
US 12,254,477 B2	Method and system for providing visual validation of electronic tickets and payment for an additional item

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
AU 2022209303 B2	Method of counting axles with computer-aided evaluation
EP 3 694 178 B1	COMPUTER SYSTEMS FOR REGULATING ACCESS TO ELECTRONIC CONTENT USING USAGE TELEMETRY DATA
EP 4 137 302 B1	METHOD AND EVALUATION DEVICE FOR MONITORING A VULCANIZATION PROCESS OF A VEHICLE TYRE IN A TYRE HEATING AND PRESSING DEVICE
CN 114631161 B	用于具有主和副电流路径的电路的真空开关装置
EP 4 091 184 B1	CIRCUIT BREAKER DEVICE AND METHOD
US 12,512,279 B2	Circuit breaker
US 12,650,316 B2	Method for generating a map for augmented reality devices in an industrial facility
US 12,192,348 B2	Key management in an integrated circuit
EP 4 252 266 B1	CASING OF INSULATING MATERIAL AND COMPACT CIRCUIT BREAKER
US 12,114,276 B2	Device and method for monitoring two time bases of two communication devices with the aid of a computer
US 12,654,754 B2	Train control systems with hazard management and associated methods
US 12,594,200 B2	Rail vehicle with fully integrated wheelchair zone
CN 113358695 B	人工神经网络的训练方法及装置、凝露传感的装置
CN 114969662 B	翅片机刀具寿命的自动统计方法及自动统计系统
JP 7516441 B2	製品関連エンティティのＥＳＧデータに関する情報を交換するエコシステム
EP 4 107 640 B1	METHOD AND SYSTEMS FOR TRANSFERRING SOFTWARE ARTEFACTS FROM A SOURCE NETWORK TO A DESTINATION NETWORK
EP 4 121 385 B1	TELESCOPIC STRUT FOR A DEVICE FOR LIFTING LOADS
US 12,475,518 B2	Distribution grid topology identification encoding known toplogial information
EP 4 118 681 B1	POWER SEMICONDUCTOR MODULE WITH AT LEAST ONE POWER SEMICONDUCTOR ELEMENT
US 12,122,051 B2	Method and device for guiding the movement of a movable machine element of a machine
EP 4 131 297 B1	SLIDE-IN SUMMATION CURRENT TRANSFORMER, FAULT CURRENT CIRCUIT BREAKER AND METHOD OF ASSEMBLY
EP 4 423 582 B1	SYSTEM, APPARATUS AND METHOD FOR MONITORING CONDITION OF AN ASSET IN TECHNICAL INSTALLATION
US 11,890,696 B2	Laser metal deposition with inoculation
AU 2023349973 B2	METHOD AND SYSTEM FOR THE TRANSMISSION OF TIME-CRITICAL DATA WITHIN A COMMUNICATION NETWORK
DE 10 2023 213 112 B4	Kapazitiver Energiespeicher für Schaltanlagen mit Energieflusskontrolle, ein Antrieb mit einem solchen Energiespeicher und eine Schaltanlage mit einem solchen Antrieb
CN 116113895 B	利用人工智能计算单元控制技术系统
EP 4 322 195 B1	CONNECTOR FOR A CIRCUIT BREAKER AND A DOWNSTREAM CONTACTOR, TAP COMPRISING SUCH A CONNECTOR AND ASSEMBLY COMPRISING SUCH A TAP
EP 4 485 348 B1	COMPUTER-IMPLEMENTED METHOD AND TOOL FOR OPTICALLY CHECKING THE QUALITY OF INTERMEDIATE OR END PRODUCTS OF PRODUCTION FACILITIES, AND PRODUCTION FACILITY CONTROLLER
BR 112023024744 B1	MÉTODO E SISTEMA PARA GERENCIAMENTO DE ALARMES EM INSTALAÇÕES DE PRODUÇÃO MODULARES
IN 555065 B	METHOD AND DEVICES FOR DETERMINING A PRODUCT QUALITY
EP 3 788 551 B1	SOLAR IRRADIATION PREDICTION USING DEEP LEARNING WITH END-TO- END TRAINING
EP 3 911 524 B1	WHEELSET FOR VEHICLES
EP 3 854 659 B1	METHOD FOR PAPER-FREE COMMISSIONING OF A ROUTE POINT FOR RAIL-BOUND TRAFFIC
EP 4 377 173 B1	METHOD AND DEVICE FOR DETERMINING BRAKING-BEHAVIOR-RELEVANT PARAMETERS
US 12,265,375 B2	Manufacturing or controlling a technical system using an optimized parameter set
GB 2633068 B	Method of performing a self-calibrating rolling brake test on a rail vehicle
EP 4 154 508 B1	DYNAMIC PROVISION OF CONTEXT-DEPENDENT COMPUTER-AIDED FUNCTIONS IN MOBILE DISTRIBUTED EDGE CLOUDS
EP 4 050 258 B1	METHOD FOR CONTROLLING A BURNER DEVICE WITH POWER DETERMINATION BASED ON A FUEL PARAMETER
CN 114005710 B	断路器的漏电故障指示机构及断路器
US 11,867,742 B2	Method and measuring assembly for detecting faults on electrical lines
CN 115335270 B	用于运输工具中的数据管理的方法和系统
EP 4 549 282 B1	MEASURING DEVICE FOR A RAIL VEHICLE AND METHOD FOR DETERMINING AT LEAST ONE CHARACTERISTIC VALUE ON THE VEHICLE SIDE
EP 3 451 091 B1	METHOD, APPARATUS, DEVICE AND SYSTEM FOR GENERATING OPERATION SIMULATION INFORMATION OF NUMERICAL CONTROL DEVICE
DE 10 2020 216 405 B4	Verfahren zum Ansteuern eines Leistungshalbleiterschalters, Ansteuerschaltung für einen Leistungshalbleiterschalter sowie elektronischer Schutzschalter
EP 3 811 739 B1	SYSTEM AND METHOD TO GROUP LIGHT SENSORS FOR CONTROLLING ILLUMINATION UNIFORMLY BASED ON AMBIENT LIGHT
US 12,409,735 B2	Vehicle with current collector
AT 528741 B1	Hilfsverriegelungseinrichtung für eine Rampe, Fahrzeug und Verfahren zum Einholen einer Rampe

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,524,596 B2	Clock domain crossing verification with setup assistance
EP 3 613 545 B1	SIMULATION ASSISTED PLANNING OF MOTIONS TO LIFT HEAVY OBJECTS
EP 4 143 523 B1	METHOD FOR IDENTIFYING COOLING BODY CONTAMINATION USING ARTIFICIAL INTELLIGENCE
US 11,938,985 B2	Smart cam for digitalization of a gate mechanism
JP 7753406 B2	技術的な設備のためのコントロールシステムおよび設備コンポーネントの証明書要求を伝送するための方法
EP 3 528 064 B1	CONTROL SYSTEM AND ASSOCIATED METHOD FOR COMMISSIONING, CONTROLLING AND MONITORING CURRENT SUPPLY COMPONENTS
IN 551154 B	CONFIGURATION OF FAULT DETECTION AND DIAGNOSTIC RULES IN A BUILDING AUTOMATION SYSTEM
CN 114207575 B	编排前端应用程序的方法、装置、电子设备、介质和程序产品
EP 4 020 346 B1	METHOD, APPARATUS, ELECTRONIC DEVICE, MEDIUM, AND PROGRAM PRODUCT FOR MONITORING STATUS OF PRODUCTION ORDER
AT 524460 B1	Trennscharnier
US 12,413,426 B2	Providing a proof of origin for a digital key pair
EP 4 117 975 B1	ASSEMBLY FOR TRANSMITTING LONGITUDINAL FORCES IN A RAIL VEHICLE
CN 110121735 B	低于3D打印机分辨率的临界薄区段的识别与重新设计
AU 2024227126 B2	Method for determining a wagon sequence of a track-guided vehicle combination
EP 3 976 438 B1	SENSOR DEVICE AND METHOD FOR A RAILWAY SYSTEM
IN 561081 B	OPEN CIRCUIT FAULT MANAGEMENT ON OVERHEAD LINES
EP 4 256 409 B1	SYSTEM AND METHOD FOR CONFIGURING, COMMISSIONING AND TROUBLESHOOTING AN HVAC UNIT
EP 4 437 310 B1	ENERGY SYSTEM WITH INCOMPLETE MEASUREMENT DATA
EP 3 980 247 B1	METHOD FOR GENERATING A STRUCTURE MESH, USE OF A STRUCTURE MESH, COMPUTER PROGRAM AND COMPUTER-READABLE MEDIUM
US 12,243,211 B2	Method to train a neural network to detect a tool status from images, method of machining and/or manufacturing, and installation
CN 113396540 B	用于断开电流路径的开关设备
US 12,194,496 B2	Resonance method for a vibration system, a converter, an excitation unit and the vibration system
CN 114128072 B	电气网络
CN 114585931 B	检查技术设施中负载电路的方法
CN 114578753 B	工件加工控制方法及装置、计算机设备、计算机可读介质
US 11,910,579 B2	Determining the flow velocity in a coolant circuit
CN 110892409 B	用于分析图像的方法和装置
US 12,473,003 B2	Traffic network and method for operating rail vehicles in a traffic network
EP 4 309 477 B1	METHOD AND CONTROL DEVICE FOR IDENTIFYING AT LEAST ONE FIXED SETUP FOR AN ASSEMBLY LINE
EP 4 497 270 B1	DYNAMIC NETWORK SLICING BASED RESOURCE SCHEDULING FOR REMOTE REAL-TIME ROBOTIC ADAPTIVE REPAIR
CN 112912871 B	用于将来自不同数据源的数据集成到知识图存储单元中的方法和系统
IN 578915 B	COMPUTER-ASSISTED METHOD FOR GENERATING TRAINING DATA FOR A NEURAL NETWORK FOR PREDICTING A CONCENTRATION OF POLLUTANTS AT A MEASURING STATION
US 12,176,166 B2	Solid-state circuit breaker includes airgap operating mechanism configured to operate in limited space
EP 4 128 479 B1	ELECTRIC MOTOR
US 11,822,546 B2	Method, apparatus and computer program for automatically processing data identifiers
EP 3 803 660 B1	KNOWLEDGE GRAPH FOR REAL TIME INDUSTRIAL CONTROL SYSTEM SECURITY EVENT MONITORING AND MANAGEMENT
EP 4 327 452 B1	TEMPERATURE DETERMINATION METHOD FOR MAGNET TEMPERATURES ON MAGNETS OF ELECTRIC MOTORS
EP 4 343 461 B1	METHOD, AUTOMATION STATION AND METHOD FOR OPERATING AN AUTOMATION STATION
KR 102757212 B1	배터리 저장 디바이스의 용량의 손실을 결정하기 위한 방법, 장치 및 컴퓨터 프로그램 제품
AT 527819 B1	Sitzblockiersystem für ein Schienenfahrzeug
CN 111656640 B	用于调节电力传输的方法和调节装置以及电网
EP 3 633 390 B1	METHOD AND DEVICE FOR DETECTING FAULTS OF A SENSOR
US 11,780,089 B2	Robot control method and apparatus
CN 115734894 B	用于轨道车辆的驾驶员座椅
EP 3 923 167 B1	METHOD FOR CREATING AN AUTOMATED SECURITY ANALYSIS OF AN INSTALLATION, DEVICE AND COMPUTER PROGRAM PRODUCT
US 12,176,163 B2	Electric grid and method for operating an electric grid
US 12,482,005 B2	Systems and methods for reducing carbon dioxide emissions using trusted on-demand distributed manufacturing
EP 4 388 570 B1	VACUUM SWITCH DEVICE AND METHOD FOR PRODUCING A VACUUM SWITCH DEVICE

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
BR 102018069520 B1	Aparelho em campo e método para a localização automática de uma falha ocorrida em linhas de transmissão de energia
EP 4 037 284 B1	METHODS, APPARATUSES AND COMPUTER PROGRAMM PRODUCT FOR RUNNING SOFTWARE ON A COMPUTER FOR CONTROLLING A TECHNICAL SYSTEM, IN PARTICULAR A SYSTEM FOR RAILWAY CONTROL SYSTEM
CN 110489532 B	提供自适应会话系统的计算机实现方法和自适应会话系统
DE 10 2022 212 034 B4	Hilfsschalter für einen elektrischen Schalter und elektrischer Schalter mit solch einem Hilfsschalter
US 12,013,418 B2	Measuring assembly for detecting a direct current
EP 3 985 631 B1	OPTICAL SMOKE DETECTOR
EP 4 063 228 B1	RAIL VEHICLE WITH CONNECTION DEVICE
AU 2024204190 B2	Crossing gate mechanism with programmable electronic switching devices
EP 3 590 011 B2	METHOD AND CONTROL DEVICE FOR CONTROLLING A TECHNICAL SYSTEM
CN 109214010 B	用于处理指令的自动翻译的方法和系统
EP 3 987 649 B1	METHOD AND DEVICE FOR DETERMINING A SATURATION CHARACTERISTIC OF A SYNCHRONOUS RELUCTANCE MACHINE
US 12,344,291 B2	System and method for monitoring failure of trains inside tunnels
EP 3 646 313 B1	APPARATUS AND METHOD FOR DISPLAYING IMAGE DATA ON A SECURED DISPLAY
CN 111077885 B	工业变频调速柜测试装置、方法、系统和计算机可读介质
EP 3 800 517 B1	METHOD FOR PROVIDING A REDUNDANT AUTOMATION SYSTEM, COMPUTER PROGRAM AND COMPUTER-READABLE MEDIUM
CN 118159812 B	用于非侵入式温度测量的温度测量设备和温度测量系统
CN 114791725 B	技术设施的控制系统的服务器的事件相关的加载限制
EP 4 063 083 B1	METHOD FOR CONFIGURING A COATING MACHINE
CN 112397338 B	用于断续器单元的通风绝缘构件
US 12,694,780 B2	Fire detector having unheated thermistors for capturing thermal fluctuations in the region of the inlet openings
EP 4 291 960 B1	METHODS AND SYSTEMS FOR ADAPTING A FEED RATE OF A FEED CONTROL ON NUMERICALLY CONTROLLED MACHINE TOOLS
CN 115428397 B	工业控制系统安全性分析方法、装置和计算机可读介质
CN 112732323 B	用于配置接口装置的方法及接口装置
US 12,051,894 B2	DC voltage switch
CN 114715453 B	阀阵控制方法、装置、输送系统、电子设备和存储介质
CN 116460840 B	具有多个运动区段的多轴运动系统的安全导向的监控的规划
CN 114237165 B	过程监控系统和用于操作过程监控系统的方法
US 12,498,698 B2	Method and system for regulating a multi-part 3D printing order transfer
EP 3 963 522 B1	METHOD FOR MANAGING DIAGNOSTICS MESSAGES AND DIAGNOSTICS INFORMATION, SOFTWARE PACKAGE, SERVER OR SERVER NETWORK, SYSTEM, AND USE
CN 111332332 B	转辙机的接点开关的驱动机构及转辙机
US 11,991,044 B2	System for data transmission between a client device, a server device, and a plurality of automation devices
EP 4 175 863 B1	METHOD FOR DETERMINING A FRESH AIR VOLUME FLOW IN A VEHICLE FOR TRANSPORTING PEOPLE, AND DEVICE FOR CARRYING OUT THE METHOD
EP 3 993 290 B1	METHOD FOR TIME SYNCHRONISATION OF SENSOR UNITS
CN 112445176 B	监视设施控制系统在正常运行条件下的作用方式的方法
EP 3 822 145 B1	METHOD AND SYSTEM FOR PROCESSING A PROJECTED SWITCH MOVEMENT CHAIN
US 12,535,538 B2	Active detection of an arc fault
IN 483048 B	SHIELD ELEMENT FOR A VACUUM INTERRUPTER
EP 4 313 837 B1	DEVICE FOR LIFTING AND STABILISING LOADS
AT 520624 B1	Stromsensoranordnung
EP 4 133 343 B1	REDUNDANT AUTOMATION SYSTEM AND METHOD FOR OPERATING A REDUNDANT AUTOMATION SYSTEM
CN 112395240 B	片上系统的寻址机制
EP 4 063 882 B1	METHOD FOR DETERMINING A CAPACITY LOSS OF A BATTERY STORAGE DEVICE, DEVICE AND COMPUTER PROGRAM PRODUCT
US 12,555,982 B2	System and method for energy management of a power distribution panel
CN 115279645 B	用于人员运输的交通工具
US 11,874,337 B2	Reliable fault detection and fault localization in a load zone of a DC system
DE 10 2017 209 084 B4	Verfahren und System zur Verbesserung einer Energieeffizienz eines in Planung befindlichen Gebäudes
CA 3195869 C	DC/DC CONVERTER SYSTEM AND CONTROL METHOD FOR FULL-BRIDGE DC/DC CONVERTER
CN 115668878 B	基于人工智能的设备识别
CN 112771755 B	配电虚拟网络

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,379,719 B2	Method and device for monitoring a milling process
US 11,815,555 B2	Universal compactor architecture for testing circuits
CN 115181826 B	高炉探尺控制方法及装置、计算设备、存储介质
US 12,373,407 B2	Method, apparatus and electronic device for detecting data anomalies, and readable storage medium
US 12,265,001 B2	Method of status monitoring
EP 4 182 832 B1	HYBRID SWITCHING ARCHITECTURE FOR SERDES COMMUNICATION CHANNELS IN RECONFIGURABLE HARDWARE MODELING CIRCUITS
EP 4 123 321 B1	METHOD, DEVICE AND A COMPUTER PROGRAM FOR IDENTIFYING THE RESIDUAL VALUE OF BATTERY STORAGE DEVICES
CN 113228012 B	用于鉴别FPGA配置的方法和设备
CN 116057824 B	功率转换器和用于运行功率转换器的方法
CN 114667657 B	混合断路器、混合断路系统及断路方法
EP 4 380 838 B1	RAIL VEHICLE AND METHOD FOR OPERATING A RAIL VEHICLE
KR 102686765 B1	적어도 하나의 공극을 갖는 재료층을 제조하는 방법
EP 4 283 196 B1	CONTROLLING A MIXING RATIO
US 12,669,551 B2	Method for determining a loss of capacity of a battery storage device, apparatus, and computer program product
US 12,231,501 B2	Method and system for providing time-critical services via a flow control environment
US 11,829,122 B2	Industrial network behavior analysis method, apparatus and system, and computer-readable medium
US 11,951,631 B2	Object marking to support tasks by autonomous machines
CN 115348135 B	一种基于工业物联网网关的数据处理装置
US 12,026,434 B2	Method and apparatus for providing an updated digital building model
US 12,696,207 B2	Timing accuracy of one or more radio data packets
US 12,452,148 B2	Method of determining a bit length of an IQ sample
CN 113592179 B	预测性维护方法、系统及存储介质
US 12,591,427 B2	PLC-based support for zero-downtime upgrades of control functions
US 12,285,866 B2	Method and device for ascertaining control parameters in a computer-assisted manner for a favorable action of a technical system
AT 526991 B1	Überwachte Stromversorgungseinheit, insbesondere zur Speisung von Komponenten eines Brand- oder Gefahrenmeldesystems
CN 115989463 B	用于机床的瞬时性能管理的系统和方法
US 12,204,305 B2	Systems and methods for digital authentication of usage data of an automation plant
EP 3 697 664 B1	RAIL VEHICLE COMPRISING A BOGIE CLADDING
CN 116802105 B	用于调车联接器的承接机构
DE 10 2020 205 022 B4	Verfahren, Authentifikationsmittel und Autorisierungseinrichtung zur Autorisierung eines Ladevorgangs
EP 4 026 152 B1	VACUUM SWITCH DEVICE FOR A CIRCUIT HAVING A MAIN AND AUXILIARY CURRENT PATH
EP 3 563 273 B1	AUGMENTED REALITY-BASED PLY LAYUPS ON A COMPOSITE PART LAYUP TOOL
EP 4 068 014 B1	HIGH AVAILABILITY CLOUD-BASED AUTOMATION SOLUTION WITH OPTIMIZED TRANSMISSION TIMES
US 12,332,311 B2	Output module and method for operating the module
US 12,417,861 B2	Insulating system made of solid insulating material and impregnating resin
EP 3 650 968 B1	PRODUCTION OR MACHINE TOOL AND METHOD FOR OPERATING A PRODUCTION OR MACHINE TOOL AND COMPUTER PROGRAM FOR OPERATING A PRODUCTION OR MACHINE TOOL
CN 115147065 B	用于在分布式环境中分派产品的生产订单的系统和方法
EP 3 926 465 B1	METHOD AND SYSTEM FOR CREATING AN APP BY MERGING SOURCE CODE
US 11,946,957 B2	Self-calibration method for self-powered single CT current sensor
EP 4 124 536 B1	METHOD FOR MANUFACTURING AN ASSEMBLY COMPRISING A VEHICLE BODY AND A CONNECTING ELEMENT
US 11,973,300 B2	Switch cabinet having a power converter having a cable connection element
CN 116157780 B	用于控制对至少一个计算机程序的访问的方法和系统
DE 10 2024 202 654 B3	Verfahren zur Bestimmung von Abgleichskoeffizienten eines Messsystems
US 12,595,926 B2	Controller and method for managing a flow unit
EP 4 107 004 B1	PRINTER SYSTEM
CN 113589765 B	技术设施的控制系统的规划数据的改变追踪
EP 4 399 651 B1	SYSTEM AND METHOD OF MONITORING A CYCLICALLY OPERATING MANUFACTURING DEVICE
US 12,314,207 B2	High bandwidth IJTAG through high speed parallel bus
US 12,462,994 B2	Circuit breaker device and method
US 12,181,002 B2	Complex ring element having additively applied connecting element

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 117480021 B	用于部件的增材制造的方法
CN 113243079 B	对借助至少一个至少三相的同步电机来驱动的特别是有轨车辆的逆变器的开关元件的操作
CN 115803200 B	预热用于增材制造的构建板
EP 3 655 306 B1	METHOD AND SYSTEM FOR INFLUENCING AT LEAST ONE RAIL VEHICLE
CN 115884865 B	在增材制造三维打印对象期间用于材料挤出的装置
AU 2022226894 B2	SYSTEM FOR PREVENTIVE MAINTENANCE OF HVAC UNITS
EP 4 268 439 B1	TECHNICAL INSTALLATION AND INTERMEDIARY DEVICE FOR A TECHNICAL INSTALLATION
EP 4 244 956 B1	METHOD FOR SHAPING AND INTRODUCING COILS INTO A STATOR OF AN ELECTRIC ROTATING MACHINE
CN 111033413 B	监视设备和用于监视系统的方法
US 11,929,136 B2	Reference bits test and repair using memory built-in self-test
US 11,999,392 B2	Condition controlling of a wear and tear element
CN 112672908 B	集电器和具有这种集电器的无轨的、电气驱动的交通工具
US 12,597,819 B2	Insulation device, motor stator and motor
US 12,348,543 B2	Method and system for detecting a cyber-attack on a machine controller
CN 120122090 B	超声波探头的测试方法、装置、电子设备及存储介质
US 12,054,056 B2	Non track-bound, electrically driven vehicle
EP 4 396 715 B1	AUTOMATIC ANALYSIS OF EXPLOITATION OF VULNERABILITY OF A SOFTWARE IMAGE
DE 10 2023 207 272 B4	Luftklappendrehantrieb
AU 2023202473 B2	Method for computer-assisted operation of a memory unit and execution of application programs having redundant data storage
US 11,945,479 B2	Self-learning warning system for rail vehicles
US 11,843,639 B2	Industrial control system security analysis method and apparatus
US 12,073,316 B2	Method for determining at least one indication of at least one change
CN 115380504 B	一种信息泄露检测方法、装置和计算机可读介质
IN 509288 B	QUICK RELEASE LATCH, RELEASE MECHANISM AND QUICK EARTHING DEVICE, HIGH-SPEED SWITCH OR SHORT CIRCUITER
US 12,379,708 B2	Systems and methods for computer-aided machining
US 12,322,952 B2	DC solid state circuit breakers for bidirectional applications
CN 114124362 B	一种密钥分发方法、装置和计算机可读介质
DE 10 2024 204 639 B3	Bedien- und Anzeigegerät für eine Gefahrenmeldezentrale, Gefahrenmeldezentrale mit einemderartigen Bedien- und Anzeigegerät sowie Verwendung einer Versorgungsspannung zur rechnerischen Ermittlung einer Batterietemperatur
EP 4 148 510 B1	METHOD FOR MONITORING AND CONTROLLING A CURRENT DISTRIBUTION IN A SYSTEM
CN 110235131 B	用于模拟工业机器人的机器人程序的方法及系统
US 12,231,017 B2	Electric motor with air-gap sleeve
US 12,158,879 B2	Cloud platform and method for efficient processing of pooled data
US 12,567,796 B2	Motor driver and motor driving system
IN 555877 B	AUTHENTICATING A DEVICE IN A COMMUNICATION NETWORK OF AN AUTOMATION INSTALLATION
US 11,868,452 B2	Method for automatically registering a user on a field device, and automation system
EP 4 288 627 B1	LOCK BODY, PIN LOCK AND COMMAND DEVICE
US 12,596,150 B2	X-masking for in-system deterministic test
AU 2025202907 B2	Single-stage evaluation of an axle counter time characteristic
EP 4 146 473 B1	ASSEMBLY FOR MATERIAL EXTRUSION FOR THE ADDITIVE MANUFACTURING OF A THREE-DIMENSIONAL OBJECT
BR 102019002524 B1	ARRANJO DE MEDIÇÃO, E, MÉTODO PARA MEDIR SINAIS ELÉTRICOS
CN 117545985 B	用于分析机械结构的运动的系统和方法
US 12,084,097 B2	Wheel set intermediate frame for a rail vehicle
CN 115097346 B	用于评估电源的输入电压的方法和系统
EP 3 447 602 B1	METHOD AND DEVICE FOR CONTROLLING THE VOLTAGE OF A TRANSFORMER SYSTEM
CN 113165165 B	用于形状配合和/或力配合的连接的装置和方法
EP 3 742 304 B1	VALIDATION OF MEASUREMENT DATASETS IN A DISTRIBUTED DATABASE
EP 4 135 279 B1	INFORMATION LEAKAGE DETECTION METHOD AND APPARATUS, AND COMPUTER-READABLE MEDIUM
DE 10 2024 206 059 B3	Trittplattform zur Spaltüberbrückung für ein Schienenfahrzeug mit Überwachungseinrichtung zur Spaltüberwachung, sowie Schienenfahrzeug
US 12,523,971 B2	Machine controller and methods for configuring and using the machine controller
CN 113424421 B	自换向逆变器及其运行

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115769550 B	用于数据通信的方法
CN 115437308 B	回转体工件的数控加工方法和装置
DE 10 2023 201 785 B3	Verbundglasscheibe, Wagenkasten und spurgeführtes Fahrzeug
US 12,560,896 B2	Providing domain models for industrial systems
EP 3 951 633 B1	MACHINE LEARNING-BASED PART DETERMINATIONS FOR COMPUTER-AIDED DESIGN (CAD) ASSEMBLIES
CN 113840695 B	标定检验组件、机器人系统、检验方法和标定方法
US 11,880,459 B2	Method and apparatus for controlling mobile storage device, and computer-readable medium
CN 115280449 B	保护开关装置及方法
EP 4 012 864 B1	SAFETY DEVICE AND METHOD FOR MONITORING AN ELECTRICAL ENERGY SUPPLY NETWORK
EP 4 232 942 B1	METHOD FOR DETECTING AN OBJECT ON A CAPACITIVE TOUCH SENSOR, OBJECT AND DETECTION SYSTEM
EP 4 077 095 B1	RAIL VEHICLE COMPRISING A SENSOR MODULE
US 12,058,057 B2	Scheduling of data traffic
US 12,166,906 B2	Method for validating a digital certificate
US 12,153,407 B2	Back annotation of load reduction in clients
EP 4 441 569 B1	METHOD, ASSEMBLY AND PROGRAM FOR CONFIGURING AND/OR PROGRAMMING AN INDUSTRIAL AUTOMATION COMPONENT
CN 112775962 B	用于确定安全区域的方法、机器人系统和计算机程序
CN 115867920 B	用于为技术系统配置控制代理的方法以及控制装置
US 12,216,454 B2	Extension device for an automation device
US 12,057,693 B2	Hybrid circuit breaker, hybrid circuit breaking system, and circuit breaking method
US 11,820,409 B2	Method for producing movement information
DE 10 2023 212 455 B3	Automatisierung anhand Sauerstoffkonzentration
US 11,879,915 B2	Method and system for evaluating an input voltage of a power supply
US 11,880,191 B2	Remote activation of the wireless service interface of a control device via a bus system
US 12,621,147 B2	Method, device and system for managing carbon data and related apparatus
CN 113544940 B	用于电机的叠片铁芯
EP 4 169 144 B1	METHOD AND SYSTEM FOR AUTOMATED SELECTION AND / OR CONFIGURATION OF AN ELECTRONIC POWER SUPPLY FOR SUPPLYING ENERGY FROM A SUPPLY NETWORK TO ELECTRICITY CONSUMERS
EP 3 952 102 B1	OVERLOAD-PROOF MOTOR CONTROL
US 11,971,708 B2	Method for providing context based artefact access
EP 3 830 931 B1	ROTOR TUBE FOR AN ELECTRIC MACHINE OF A VEHICLE
EP 3 997 532 B1	A SYSTEM AND METHOD FOR MINIMIZING NON-PRODUCTIVE IDLE TIMES WITHIN AN AUTOMATION PROCESS
EP 3 939 852 B1	PASSENGER TRANSPORT VEHICLE WITH CLAMPED WINDOW PANE
JP 7371099 B2	調整可能な数のトランザクションブロックと複数の仲介ブロックとを含むブロックを有するブロックチェーンの生成
US 12,683,408 B2	Method and control apparatus for controlling load flows between multiple energy systems
AT 526524 B1	Dämpfende Koppelvorrichtung und Schienenfahrzeugbaugruppe
EP 3 878 157 B1	ADJUSTMENT OF A SOFTWARE APPLICATION EXECUTED ON A GATEWAY
US 12,292,339 B2	Method for determining a thermal consumption of an energy system, energy management system and energy system
EP 3 937 095 B1	DETERMINING CONTRACTUAL OUTPUT DATA IN RESPONSE TO A CONTRACTUAL REQUEST
EP 4 335 718 B1	BODYSHELL, IN PARTICULAR A SIDE WALL AND/OR A VEHICLE DOOR, FOR HOLDING A PANE FOR A VEHICLE, IN PARTICULAR A RAILWAY VEHICLE
EP 3 782 851 B1	ASSISTANCE SYSTEM FOR A RAIL VEHICLE
CN 113424385 B	具有可变电压的直流电网
EP 3 943 771 B1	METHOD AND APPARATUS OF ASSEMBLING ONE OR MORE BEARINGS
CN 113892106 B	用于在云计算环境中提供仿真模型产生的方法和系统
CN 116094373 B	纱锭成型摆频控制方法及装置、介质、设备
CN 117083215 B	用于确定设备的运行性能参数的方法和系统
US 11,894,675 B2	DC voltage grid with variable voltage
US 12,323,082 B2	Power converter arrangement
EP 3 932 724 B1	VEHICLE WITH CURRENT COLLECTOR AND RAIL FOR VEHICLES WITH CURRENT COLLECTOR
CN 111386501 B	用于优化工业工厂的调整的基于云的方法和系统
JP 7559226 B2	人工知能用演算ユニットを用いた技術システムの制御
EP 4 449 220 B1	CONTROL SYSTEM FOR A TECHNICAL PLANT AND METHOD OF OPERATION

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,464,391 B2	System and method for monitoring a sensor network
CN 117546166 B	用于检查数据匿名化的计算机实现的方法和系统
CN 113518898 B	用于旋转编码器的保持装置
US 12,473,169 B2	Measurement value correction of a reference mark on a material web
US 12,523,988 B2	Sharing world model objects between multiple autonomous systems
EP 4 492 453 B1	ELECTRONIC ASSEMBLY WITH IMPROVED MOUNTING OF A HEAT SINK
US 11,984,765 B2	Rotor tube for an electric machine of a vehicle
EP 3 867 870 B1	DETERMINING THE TRANSMISSION QUALITY OF AN OPTICAL UNIT IN A CAMERA SYSTEM
US 12,301,076 B2	Method for sintering a multicomponent object to be sintered, electric machine, and electric vehicle
DE 10 2020 206 577 B4	Überwachungseinrichtung, insbesondere Umfeldüberwachung, für einen Brandmelder sowie Brandmelder und Zusatzeinrichtung jeweils mit einer derartigen Überwachungseinrichtung
US 12,463,431 B2	Unsupervised solar energy disaggregation system and method
EP 4 392 770 B1	METHOD FOR DETERMINING A COMPOSITION OF A SUBSTANCE SAMPLE AND DETECTOR
US 11,777,967 B2	Recognizing deviations in security behavior of automation units
US 11,995,076 B2	System, computing platform and method of integrating data from a plurality of data sources
CN 112970038 B	优化具有多个库位置的刀库的刀具运输的方法和设备
US 12,307,001 B2	Method and configurable hardware module for monitoring a hardware-application
CN 115004188 B	用于处理经拓扑优化的几何结构的系统和方法
US 12,254,292 B2	Engineering station and method for diagnosing a user program
US 12,639,422 B2	Automatic, security-induced relocation of at least one container instance
KR 102812537 B1	인쇄 회로 보드 어셈블리의 품질을 예측하기 위한 시스템들 및 방법들
CN 112020682 B	输出模块、控制系统和用于测试连接到复杂负载的输出模块的方法
EP 4 033 314 B1	EVENT-RELATED LOAD RESTRICTIONS FOR A SERVER OF A CONTROL SYSTEM OF A TECHNICAL INSTALLATION
CN 116330379 B	裁切控制方法、装置及裁切系统、计算机存储介质
EP 3 714 470 B1	CAPACITOR STRUCTURE AND POWER MODULE WITH A HIGH PERFORMANCE ELECTRONICS COMPONENT
EP 4 176 421 B1	METHOD FOR AUTOMATICALLY IDENTIFICATION FIRE ALARMS
US 12,665,142 B2	Circuit breaker device for protecting an electrical low-voltage circuit
EP 4 490 012 B1	SENSOR, AND RAILWAY TRACK SYSTEM COMPRISING A SENSOR
EP 4 017 688 B1	MACHINE LEARNING ENABLED VISUAL SERVOING WITH DEDICATED HARDWARE ACCELERATION
US 12,688,947 B2	Insulation system for electric rotating machines, method of production for same and powder coating
US 12,056,152 B2	Operational policies of industrial field devices and distributed databases
US 11,868,501 B2	System device and method for managing access to data in an automation environment
EP 4 476 872 B1	COMPUTER-BASED INDUSTRIAL APPARATUS AND METHOD FOR OPERATING A COMPUTER-ASSISTED INDUSTRIAL APPARATUS
EP 4 374 152 B1	DAMPER TORQUE OR VALVE FORCE TESTING DEVICE
DE 10 2018 216 011 B4	Vorrichtung zur Messung von physikalischen Größen
US 12,135,770 B2	Method and system for user authentication
US 12,093,016 B2	Numerical controller which can be parametrised by the machine manufacturer
US 12,561,495 B2	Digital twin service for a fire system
US 12,592,041 B2	Mixed sheet extension
EP 4 051 919 B1	COMPENSATING COUPLING
CN 112449700 B	语义模型实例化方法、系统和装置
DE 10 2024 202 973 B3	Verfahren und Vorrichtung zur Erzeugung eines digitalen Abbilds einer Trasse eines Schienenfahrzeugs
EP 4 341 649 B1	METHOD FOR FLOW MEASUREMENT THAT IS SUBJECT TO INTERFERENCE, MAGNETO-INDUCTIVE FLOWMETER AND COMPUTER PROGRAM PRODUCT
EP 4 572 995 B1	METHOD FOR CREATING A TRAIN CONTROLLER AND TRAIN
US 12,626,878 B2	Reverse handle accessory for molded circuit breaker
US 12,406,779 B2	Insulating system comprising a solid insulating material and impregnating resin
US 12,009,044 B2	Memory built-in self-test with automated multiple step reference trimming
EP 4 118 496 B1	METHOD AND SYSTEMS FOR PROVIDING A SIMULATION MODEL OF AN ELECTRIC ROTARY MACHINE
US 12,322,675 B2	Electronic module comprising a pulsating heat pipe
DE 10 2024 203 499 B4	Computer-implementiertes Rollenverwaltungsverfahren und zugehöriges System
EP 4 066 277 B1	METHOD FOR MANUFACTURING A POWER MODULE UNIT
CN 112560551 B	用于车牌识别的系统、方法和设备

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CA 3142128 C	SYSTEM AND METHOD TO IMPROVE EMERGENCY RESPONSE TIME
EP 4 298 654 B1	RAPID SAFETY SWITCH AND RAPID SAFETY SWITCH SYSTEM
EP 4 409 708 B1	CALCULATION OF MORE ACCURATELY ESTIMATED LOCATION OF GROUND FAULT SHORT CIRCUITS IN COMPLEX RAILWAY POWER SUPPLY ARRANGEMENTS
EP 4 085 504 B1	ENERGY MANAGEMENT METHOD AND ENERGY MANAGEMENT SYSTEM
CN 115668873 B	运行用于传输时间关键的数据的通信系统的方法、交换机和通信系统
CN 115771810 B	线轴转速控制及卷绕机控制方法和装置
CN 113474971 B	具有以增材方法施加的连接元件的复杂的环形元件
US 12,694,503 B2	Contour extraction of images with selection-based auto tuning
US 12,547,134 B2	Automation controller and method for operating the automation controller
EP 4 055 450 B1	COGNITIVE ENGINEERING GRAPH
EP 4 573 617 B1	COOLANT COLLECTION DEVICE WITH RIGID TUBE CONNECTIONS
US 11,789,850 B2	System and method for testing a physical system including software and hardware
EP 4 014 096 B1	QUEUE BLOCKS FOR FLEXIBLE AUTOMATION ENGINEERING PROGRAMS
JP 7463515 B2	技術システムを制御する制御装置および制御装置を構成する方法
US 12,675,755 B2	Method and device for hierarchically planning executions of operation sequences achieving goal states of technical system workflows and checking them through system simulation or system hardware execution
US 12,578,699 B2	Method and system for providing control applications for an industrial automation system
US 12,039,684 B2	Method and system for predicting a collision free posture of a kinematic system
US 12,086,238 B2	Methods and systems for controlling access to at least one computer program
JP 7631565 B2	分散自動化システムにおける機能コントローラを接続するための方法および装置
KR 102614614 B1	에너지 시스템의 동작을 시뮬레이팅하기 위한 컴퓨터-지원 방법 및 에너지 관리 시스템
JP 7746557 B2	設備画像の縮小図を用いた技術設備用の制御システム
US 12,186,908 B2	Force-limited movement of at least one element of a production machine in manual operation
CN 113785458 B	用于直流电压电路的开关装置
AT 526526 B1	Vorrichtung und Verfahren zur Entgleisungsdetektion für Schienenfahrzeuge und Schienenfahrzeug
US 12,354,116 B2	Ecosystem and method for exchanging information about ESG data of a product related entity
CN 111177984 B	电子设计自动化中异构计算单元的资源利用
CN 116325459 B	用于求出电子器件的温度的装置和方法
EP 3 822 799 B1	ADDRESS IDENTIFICATION METHOD, APPARATUS AND SYSTEM, AND STORAGE MEDIUM, PROCESSOR AND TERMINAL
CN 113348477 B	用于协调分配的MES订单管理的基于协商的方法和系统
GB 2641130 B	Railway vehicle monitoring and signalling system and method
US 12,517,487 B2	System and method for enabling scalable processing throughput of high-volume data on industrial controllers
JP 7764537 B2	生産設備の中間製品または最終製品の光学的品質管理のためのコンピュータ実装方法およびツールならびに生産設備制御装置
EP 3 701 403 B1	ACCELERATED SIMULATION SETUP PROCESS USING PRIOR KNOWLEDGE EXTRACTION FOR PROBLEM MATCHING
IN 590745 B	METHOD FOR AUTOMATED DETERMINATION OF A MODEL COMPRESSION TECHNIQUE FOR COMPRESSION OF AN ARTIFICIAL INTELLIGENCE-BASED MODEL
EP 4 292 242 B1	SIGNING SYSTEM FOR VALIDATING STATEFUL HASH-BASED DIGITAL SIGNATURES
EP 3 632 190 B1	ELECTRICAL ASSEMBLY AND METHOD FOR MAUFACTURING AN ELECTRICAL ASSEMBLY
EP 4 025 451 B1	ELECTRICALLY PROPELLED VEHICLE, ESPECIALLY RAILWAY VEHICLE
US 12,155,194 B2	Method and device for connecting a capacitive load assembly to a DC grid
US 11,866,075 B2	Method for monitoring the position of a parked rail vehicle, and computer program, in particular for a train safety system
EP 3 977 211 B1	CONTROL SYSTEM AND METHOD FOR OPERATING A CONTROL SYSTEM
CN 113454725 B	用于单路径可逆扫描链的双向扫描单元
US 12,213,292 B2	Cooling of semiconductors for optimised service life
EP 4 057 088 B1	SECURE OPERATION OF MULTIPLE-AXLE KINEMATIC
EP 4 179 448 B1	COMPUTING PLATFORM FOR SIMULATING AN INDUSTRIAL SYSTEM AND METHOD OF MANAGING THE SIMULATION
CN 112135748 B	设置充电站的通信模块的通信参数
EP 4 466 619 B1	METHOD AND SYSTEM FOR ENABLING ACCESS RIGHTS TO CONTROL APPLICATIONS OF AN INDUSTRIAL AUTOMATION SYSTEM
EP 3 876 477 B1	METHOD FOR CHECKING THE CURRENT CONDITION OF ELECTRONIC COMPONENTS
CN 115702491 B	具有至少一个功率半导体元件的功率半导体模块
IN 573742 B	MANUFACTURING OR CONTROLLING A TECHNICAL SYSTEM USING AN OPTIMIZED PARAMETER SET

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,876,533 B2	Method for computer-assisted operation of a memory unit and execution of application programs with memory checking for memory errors
EP 4 254 109 B1	SYSTEM STATE EVALUATION
EP 3 582 521 B1	DEVICE AND METHOD FOR SETTING UP AND/OR PROVIDING A WORKING ENVIRONMENT, IN PARTICULAR USED IN A MACHINE ECONOMY ENVIRONMENT
CN 113767374 B	通信设备和系统
CA 3200088 C	METHOD FOR PRODUCING A MATERIAL LAYER WITH AT LEAST ONE VOID
EP 3 850 446 B1	EXTENSION DEVICE FOR A PROGRAMMABLE LOGIC CONTROLLER
US 12,214,998 B2	Mechanical anti-sway control method for cranes
EP 3 601 896 B1	METHODS AND SYSTEM FOR BUILDING ENERGY SPLIT CALCULATION AND VISUALIZATION
IL 259143 B1	מינוש רוציי יטירפ לש תילאוזיו רוציי ספ תקידבל הטישו תכרעמ
EP 3 994 046 B1	METHOD, APPARATUS AND RAIL VEHICLE
EP 3 992 536 B1	METHOD AND DEVICE FOR DETERMINING THE AIR FLOW VOLUME THROUGH A VENTILATION PIPE OF A VENTILATION SYSTEM
US 12,101,024 B2	Switching control method for three-level flying-capacitor converter
CN 116391348 B	用于运行网络的方法和计算机程序产品
DE 10 2020 209 017 B4	Fehlererkennung in Federspeichersystemen von Mittelspannungsleistungsschaltern
CN 113874796 B	改变工业自动化组件的程序的方法和工程规划系统
US 12,664,337 B2	Machine learning-based selective incarnation of computer-aided design objects
CN 116034362 B	容器镜像的扩展的完整性监视
CN 116249607 B	用于机器人抓取三维物体的方法和装置
US 11,900,081 B2	Computer-implemented method and technical system for task-oriented system definition, implementation and operation
CN 116113893 B	借助于基于数据的调节模型控制技术系统
US 11,927,942 B2	Automatic setup of digital twins for industrial controllers
AU 2020433707 B2	Control platform for exchanges of energy between a plurality of energy systems, and energy exchange system
DE 10 2023 200 635 B4	Energiemesszähler für einen elektrischen Schalter
CN 114852774 B	绕线工艺配置方法、装置、系统及电子设备
CN 115278042 B	图像处理中帧速率的设置方法、装置和计算机可读介质
CN 116275435 B	自动化焊接生产设备
EP 4 227 891 B1	METHOD, APPARATUS AND SYSTEM FOR DETERMINING MODEL PARAMETERS OF UNSCENTED KALMAN FILTER
DE 11 2018 008 022 B4	Verfahren zum Betreiben einer permanenterregten Drehstrommaschine mit einem Läufer und einem Sanftstarter und Drehstrommaschine
EP 4 010 216 B1	METHOD AND AUTHORIZATION DEVICE FOR THE CERTIFICATE-BASED AUTHORIZATION OF A SERVICE USER AT A DELIVERY STATION
US 12,411,722 B2	Method for data communication between a management level and a field level of an industrial system
CA 3218746 C	TRAIN CONTROL SYSTEMS WITH HAZARD MANAGEMENT AND ASSOCIATED METHODS
CN 112088387 B	检测成像物品缺陷的系统和方法
DE 10 2023 209 499 B4	Übergangstürvorrichtung für ein großräumiges Fahrzeug mit Gangschlucht
EP 4 540 670 B1	COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR GENERATING SIMULATION MODELS FOR A DIGITAL TWIN OF A PROCESS OF A PRODUCTION PLANT FOR A PRODUCT
IN 459222 B	CONTROL METHOD AND UNIT OF MOBILE STORAGE DEVICES AND STORAGE MEDIUM
US 12,181,854 B2	Production using a machine tool of faces definable by cone segments
CN 111742438 B	传感器装置和用于其运行的方法
EP 4 332 502 B1	METHOD AND DEVICE FOR DETERMINING THE POSITION OF A TRACK-BOUND VEHICLE
EP 4 377 822 B1	COMPUTER-IMPLEMENTED METHOD AND SURVEILLANCE ARRANGEMENT FOR IDENTIFYING MANIPULATIONS OF CYBER-PHYSICAL-SYSTEMS AS WELL AS COMPUTER-IMPLEMENTED-TOOL AND CYBER-PHYSICAL-SYSTEM
EP 4 460 865 B1	ENERGY STORAGE MODULE, ENERGY STORAGE ASSEMBLY AND VEHICLE WITH AN ENERGY STORAGE ASSEMBLY, AS WELL AS A METHOD FOR EXCHANGING AN ENERGY STORAGE MODULE OF AN ENERGY STORAGE ASSEMBLY OF A VEHICLE
CN 112242900 B	有用数据的密码保护的单向数据传输的方法和通信单元
EP 3 745 150 B1	METHOD AND DEVICE FOR DETERMINING THE DEGRADATION OF A BATTERY MODULE OR BATTERY CELL
US 12,594,837 B2	Connection connector for drive units
EP 4 463 784 B1	DYNAMIC INTEGRITY MONITORING OF A CONTAINER RUNTIME ENVIRONMENT EXECUTED ON A HOST COMPUTER
CN 112118992 B	用于轨道车辆的通风模块
CN 114474038 B	用于将非电气组件组装到组件载体上的方法和组装单元
EP 4 186 775 B1	METHOD AND DEVICE FOR DETECTING THE PROPERTIES OF A VEHICLE
US 12,656,762 B2	Method and system for seamless transition of runtime system from controller device to digitalization platform

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115867913 B	隐私保护的单向通信设备
US 11,999,574 B2	Reel motor with closed cooling circuit
US 12,405,772 B2	Managing an app, for example developing an app comprising updating a workflow of the app, method, and system
US 12,432,234 B2	Decision support for anomaly detection via impact analysis for security and safety
EP 4 523 158 B1	CLASSIFICATION METHOD AND DEVICE
EP 4 073 626 B1	METHOD AND SYSTEM FOR GENERATING ENGINEERING DIAGRAMS IN AN ENGINEERING SYSTEM
CN 113170323 B	用于测试无线电设备的设备、系统和方法
US 12,602,903 B2	Method for analyzing image information using assigned scalar values
IN 487728 B	MEDIUM-VOLTAGE CIRCUIT BREAKER
AU 2020340467 B2	Power distribution method and apparatus
CN 115773841 B	用于监测电力电容器的设备和这种设备的适配器
US 12,417,435 B2	Engineering a physical system method and system
JP 7516464 B2	蓄電池の容量損失を算定する方法、装置およびコンピュータプログラム製品
US 11,869,705 B2	Transformer for a DC/DC voltage converter
EP 3 790 241 B1	METHOD AND GATEWAY DEVICE FOR TRANSMITTING DATAGRAMS VIA TWO OR MORE NETWORKS
EP 4 114 681 B1	CHARGING DEVICE AND METHOD FOR CHARGING ELECTRICAL DEVICES
US 11,927,936 B2	Safe operation of a multi-axis kinematic system
CN 111954857 B	异常事件的原因确定
EP 4 118 741 B1	ASSEMBLY, SYSTEM AND METHOD FOR DETERMINING TEMPERATURE OF AN ELECTRIC MACHINE
CN 111819538 B	在云计算系统上的工件生命周期管理
US 12,222,919 B2	Method of indexing a hierarchical data structure
EP 3 831 761 B1	AUTOMATIC DOOR SYSTEM AND METHOD FOR CONTROLLING AN AUTOMATIC DOOR SYSTEM
EP 4 196 885 B1	DELTA CLONE-BASED DATABASE UPGRADES
CN 113348418 B	用于生成组合不同抽象层的多组件系统的混合层故障树的计算机实现的方法
US 12,183,133 B2	Method and system for determining operating performance parameters of a device
CN 116171436 B	用于促进工业系统的工程化的系统和方法
DE 10 2024 202 458 B3	Verfahren zur Datendiagnose eines Motors
US 12,524,866 B2	Optimizing a set-up stage in an automatic visual inspection process
US 12,006,763 B2	Rail vehicle door
AU 2022218511 B2	Sensor device, arrangement, and method for detecting a change in a magnetic field
US 12,159,254 B2	Apparatus for the semantic-based optimization of production facilities with explainability
EP 4 115 310 B1	METHOD AND DEVICE FOR DETECTING MALICIOUS SERVICES IN A NETWORK
US 11,983,470 B2	Method for synchronizing programs for simulation of a technical system
CN 113113966 B	开关装置
EP 3 968 037 B1	METHOD AND DEVICE FOR DETECTING A FAULT LOCATION IN AN ELECTRICAL ENERGY DISTRIBUTION NETWORK
US 12,330,632 B2	Method, computer-implemented tool, vehicle control unit, and vehicle for locating obstacles in vehicle roadway regions, which are characterized by landmarks
BR 112020018356 B1	MÉTODO E DISPOSITIVOS PARA LOCALIZAR UM PONTO DE FALHA EM UMA REDE DE ÁREA COM BASE EM UMA ONDA PROGRESSIVA E MEIO DE ARMAZENAMENTO LEGÍVEL
EP 3 771 613 B1	METHOD AND DEVICE FOR CONTROLLING A RAIL SYSTEM
US 12,535,808 B2	Real-time calibration for detailed digital twins
IN 546142 B	METHOD AND APPARATUS FOR ANALYSING AN IMAGE
US 12,384,435 B2	Automated counterbalance system and method for determining counterbalance and adjusting counterweights of a crossing gate
CN 113883193 B	电磁止动闸及其控制装置和方法以及电机
EP 4 255 789 B1	CATCHING DEVICE FOR A SHUNT COUPLING
US 11,847,619 B2	System-state monitoring method and device and storage medium
EP 4 068 349 B1	POWER MODULE
US 11,845,479 B2	Drainage device for a window
CN 115380259 B	用于运行具有刀具的机器的方法和设备
CN 114514483 B	过程测量值的面向事件的传输
CN 112272804 B	无需动态系统模型的工业过程在线故障定位
EP 4 173 122 B1	METHOD FOR MONITORING THE OPERATION OF A DRIVE COMPONENT, APPARATUS AND USE

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 110506261 B	用于运行数据存储系统的方法、用于执行该方法的计算机程序和根据该方法工作的数据存储系统
CN 113508288 B	具有波长选择偏振器的散射光烟雾探测器以及这种偏振器的合适用途
CN 113966495 B	线束组装线平衡
CN 116529741 B	基于仿真的闭环APS调度优化方法、系统及存储介质
US 12,485,486 B2	Systems and methods for automatic detachment of support structures for 3D printed parts
EP 4 439 007 B1	METHOD AND DEVICE FOR DETERMINING THE WHEEL DIAMETER OF A WHEEL OF A VEHICLE
DE 10 2019 220 241 B4	Schließsystem für ein Transportmittel sowie Verfahren zur Steuerung der Notentriegelung
CN 116829434 B	用于轨道车辆的固持接口和缓冲系统
CN 112732533 B	工业监控软件运行脚本程序的方法、装置和可读介质
US 11,805,110 B2	Method for transmitting data packets
US 12,108,252 B2	Short range wireless translation methods and systems for hands-free fare validation
CN 113366453 B	使用神经语言编程和机器学习机制基于行为驱动开发步骤定义和相似性分析从行为驱动开发场景生成测试模型
CN 111723176 B	一种用于生成合成交互的语义描述的方法
US 12,393,419 B2	Industrial application package management
EP 4 064 805 B1	ASSEMBLY FOR ATTACHING A CIRCUIT BOARD
US 12,651,936 B2	Four-pole synchronous reluctance motor
US 11,881,706 B2	Switching device for opening a current path
EP 4 127 848 B1	METHOD AND SYSTEM FOR DIAGNOSING OF MESSAGES
US 11,898,917 B2	Method for monitoring a coil temperature
EP 4 124 539 B1	METHOD FOR COUNTING AXLES WITH COMPUTER-AIDED EVALUATION
CN 114556889 B	用于配置OPC UA发布订阅用户的方法、自动化系统和计算机可读介质
AT 527478 B1	Stromabnehmer für ein Fahrzeug und Fahrzeug
US 12,341,915 B2	System and method for writing and retrieval of data in a distributed ledger
EP 4 320 512 B1	SYSTEM AND METHOD FOR ADAPTING A RECONFIGURABLE RUNTIME SYSTEM USED IN AUTOMATION SYSTEMS
CN 114450647 B	技术系统的诊断
CN 114731341 B	信息获取方法、设备和系统
EP 4 340 311 B1	METHOD AND CONTROL PROGRAM FOR THE AUTOMATED CONFIGURATION OF A COMMUNICATION NETWORK COMPRISING SEVERAL VLANS
EP 3 996 345 B1	METHOD FOR CONFIGURING PRIORITY LEVEL, CLOUD PLATFORM, SYSTEM, COMPUTING DEVICE, AND MEDIUM
EP 3 929 019 B1	VEHICLE, IN PARTICULAR RAILING VEHICLE WITH TRACTION- AND BOARD NET
US 12,030,534 B2	Method and arrangement for distributing passengers in a passenger train
US 12,596,532 B2	Workflow creation method and apparatus
CN 115362520 B	用于操作开关装置的带智控的触发设备和运行触发设备的方法
EP 4 005 076 B1	POWER CONVERTER WITH ACTIVE ATTENUATION OF THE INTERMEDIATE CIRCUIT VOLTAGE
IN 570960 B	IMPROVED TECHNIQUE FOR MACHINE VISUAL LEARNING
EP 4 164 930 B1	COMPRESSED-AIR SUPPLY ARRANGEMENT FOR A TRAIN ASSEMBLY
EP 4 289 123 B1	CONTAINER-MEDIATED APPLICATION CONFIGURATION
EP 4 123 284 B1	FAULT DIAGNOSIS METHOD AND APPARATUS THEREFOR
EP 3 956 193 B1	ENERGY DISSIPATION DEVICE
CN 114788160 B	用于控制电池的电流输出的方法
US 11,930,071 B2	Network adapter for unidirectional transfer of data
CN 116431600 B	数据库一键式创建方法及装置、介质、设备
CN 115526540 B	电寿命的评估方法、装置、计算机可读介质及电子设备
US 11,828,350 B2	Actuating drive having a wound flat spring as a restoring spring, which flat spring is designed as a constant-force spring and acts directly on an actuation connection point of the actuating drive
AU 2025200896 B2	Method for carrying out a brake test in rail-guided vehicle combination and vehicle suitable for it
EP 4 149 693 B1	RESONANCE METHOD FOR A VIBRATION SYSTEM, A CONVERTER, AN EXCITATION UNIT AND VIBRATION SYSTEM
US 12,316,095 B2	Solid-state circuit breaker having a sealed vacuum gap section for providing an intrinsic safe operation
IN 505106 B	ADJUSTING DEVICE AND METHOD FOR ADJUSTING SWITCHING DEVICE MECHANISMS
EP 4 391 004 B1	CIRCUIT BREAKER, CIRCUIT BREAKER OVERTRAVEL ADJUSTMENT METHOD AND POWER SYSTEM
CN 112514328 B	通信系统、提供商节点、通信节点以及用于向客户节点提供虚拟网络功能的方法
US 12,549,443 B2	Network configuration method and apparatus
EP 3 914 979 B1	VIRTUAL SENSOR ON A SUPERORDINATE MACHINE PLATFORM

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 113906474 B	点云模型的切割方法、装置和系统
CN 112514329 B	现场设备的操作功能的操作约束
CN 114041281 B	现场数据传输方法、装置、系统和计算机可读介质
US 12,238,228 B2	Operational safety using a distributed ledger
DE 10 2022 208 451 B4	Betriebsverfahren für ein Ventilsystem, Computerprogrammprodukt, Steuereinheit, Ventilbetätigungsvorrichtung, Ventilsystem und Simulationsprogrammprodukt
US 12,511,220 B2	Industrial network-based codeless tracking analytics method and apparatus for industrial software
EP 4 088 314 B1	SEMICONDUCTOR MODULE WITH A HOUSING
EP 3 576 063 B1	SMOKE DETECTOR UNIT WITH LED AND PHOTORECEIVER, LED CHIP IN THE LED AND PHOTOSENSOR FOR DETERMINING AGEING AND/OR A LIGHT BEAM COMPENSATION LEVEL, AND LED
US 12,344,290 B2	Method and device for controlling a rail vehicle
CN 113812131 B	用于配置循环传输消息的通信网络的方法
US 12,518,937 B2	Electric switching device for medium- and/or high-voltage uses
CN 115731585 B	人像检测方法、装置、电子设备和存储介质
US 12,261,922 B2	Method and gateway device for transmitting datagrams via a plurality of networks
IN 510797 B	METHOD AND DEVICE FOR BRAKING A TRAIN SET
EP 4 272 037 B1	PLC-BASED SUPPORT FOR ZERO-DOWNTIME UPGRADES OF CONTROL FUNCTIONS
JP 7852039 B2	はんだ付け接合部の生成方法、及び、はんだ付け接合部を有するアセンブリ
US 12,518,074 B2	Object design processing using coarse geometric elements and high-resolution lattice elements
AT 526523 B1	Dachhaube für ein Schienenfahrzeug
EP 4 045 980 B1	SYSTEM AND METHOD FOR MANAGING CRYSTALLIZATION PROCESS IN PROCESS CONTROL PLANT
EP 4 089 937 B1	OFDM DATA TRANSMISSION METHOD AND DEVICES FOR CARRYING OUT THE SAME
US 12,552,263 B2	Electric drive system, power train, vehicle, and method of operating an electric drive system
EP 3 790 779 B1	RAIL VEHICLE WITH A DRIVE CONTROLLER
US 11,823,852 B2	DC voltage switch
EP 4 318 210 B1	APPLICATION PROGRAM CONSTRUCTION METHOD, EXECUTION METHOD, COMPUTING DEVICE, AND STORAGE MEDIUM
IN 506530 B	LIGHTING CONTROL SYSTEM CONFIGURABLE BY CONTROL DEVICE
US 12,380,339 B2	Automatically generating training data of a time series of sensor data
IN 495854 B	METHOD, APPARATUS AND COMPUTER PROGRAM FOR LOCATING A FAULT IN A POWER DISTRIBUTION GRID
EP 4 237 306 B1	SANDING SYSTEM FOR A RAIL VEHICLE
EP 3 856 604 B1	RAIL VEHICLE FOR PASSENGER TRANSPORT, WITH GANGWAY CONNECTION
JP 7877448 B2	ベローズを備えた開閉装置
US 12,538,801 B2	Semiconductor assembly comprising a first semiconductor element and a first connection element
EP 3 671 584 B1	METHOD AND SYSTEM FOR CONTROLLING A PRODUCTION PROCESS
EP 3 717 975 B1	METHOD AND DEVICE FOR PLANNING A SPECIFIC PROCESS ENGINEERING PLANT
US 11,867,296 B2	Valve assembly
EP 4 160 845 B1	SYSTEM FOR CONTROLLED STARTING AND OPERATING OF A REDUNDANT ENERGY BUS
EP 3 855 569 B1	ELECTRICAL DEVICE AND METHOD OF FORMING AN ELECTRICAL JOINT
EP 3 807 970 B1	METHOD FOR CONTROLLING AN EXCHANGE OF ENERGY IN AN ENERGY SYSTEM; CONTROL CENTRE; ENERGY SYSTEM; COMPUTER PROGRAM; AND STORAGE MEDIUM
US 12,626,027 B2	Methods for modelling variations of repeating parts of a component
US 12,455,729 B2	Automatic arrangement of HMI screens
US 12,545,117 B2	Road-guided motor vehicle and method for raising the pantograph of a power collector of a road-guided motor vehicle
EP 4 412 885 B1	PASSENGER RAIL VEHICLE HAVING AN EMERGENCY EXIT
CN 115280123 B	一种故障诊断方法及其装置
US 11,834,084 B2	Method for mixed operation of a section of railroad line with switch, and section of line and switch
EP 3 620 973 B1	TRACKING AND TRACEABILITY OF PARTS OF A PRODUCT
CN 114153161 B	具有HART多路复用器的数据收录设备
CN 115343044 B	用于对装置进行状态监控的方法和组件
US 12,612,091 B2	Railroad crossing control system with auxiliary shunting device
CN 112753147 B	低压断路器和故障电弧识别单元
CN 116802628 B	数据管理和查询方法、装置、服务网格系统、计算设备
EP 4 232 341 B1	SELF-LEARNING METHOD FOR OBSTACLE DETECTION FOR A RAIL VEHICLE, OBSTACLE DETECTION UNIT, AND RAIL VEHICLE COMPRISING AN OBSTACLE DETEION UNIT

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 3 835 898 B1	ARTIFICIAL INTELLIGENCE COMPUTING DEVICE, CONTROL METHOD AND APPARATUS, AND INDUSTRIAL AUTOMATION SYSTEM
US 12,619,213 B2	Controlling method and device for an industrial device
US 12,620,219 B2	Method and assistance system for checking samples for defects
CN 114039708 B	起重机远程控制的通信方法、装置和计算机可读介质
US 12,047,249 B2	Centralized management of data flow maps for distributed edge node deployment
US 12,456,057 B2	Methods for building a deep latent feature extractor for industrial sensor data
EP 4 511 663 B1	DEVICE AND METHOD FOR INSPECTION AND / OR MONITORING OF A PHASE
CA 3150033 C	LOCATION DETERMINATION OF MOBILE DEVICES
US 12,038,739 B2	Method for the offline and/or online identification of a state of a machine tool, at least one of its tools or at least one workpiece machined therein
EP 4 197 847 B1	METHOD FOR OPERATING A VEHICLE
US 12,147,590 B2	Aligning and augmenting a partial subspace of a physical infrastructure with at least one information element
US 12,443,451 B2	Method for the computer-aided execution of a technical process in processing units, computing environment, and storage medium
IN 590337 B	COMPUTER-AIDED DESIGN METHOD AND DESIGN SYSTEM
CN 111244781 B	开关柜与组装开关柜的方法
EP 4 595 405 B1	METHOD AND SYSTEM FOR TRANSMITTING TIME-CRITICAL DATA WITHIN A COMMUNICATION NETWORK
CN 111857679 B	用于生成脚本程序的方法、装置及脚本程序处理系统
CN 112204870 B	能量转换器
CN 113491076 B	无线电设备测试装置
US 12,505,896 B2	Memory built-in self-test with address skipping trim search
EP 4 341 759 B1	ALARM-ASSOCIATED CONTAINERS IN IMAGES OF INDUSTRIAL PLANTS
EP 3 977 681 B1	TRANSMISSION DEVICE FOR TRANSMITTING DATA
CN 119072691 B	用于给工业自动化系统的控制应用程序授予访问权限的方法和系统
JP 7725717 B2	ハードウェアベースのセンサ分析
US 12,238,011 B2	Computer-implemented method for adapting at least one pre-defined frame delay
EP 3 633 291 B1	METHOD AND CONTROLLER FOR SIGNALING ICING IN A HEATING, VENTILATION OR AIR-CONDITIONING EQUIPMENT
EP 4 335 656 B1	SOUND DAMPING DEVICE FOR VEHICLE WHEELS
DE 10 2017 219 533 B4	System und Verfahren zur Zutrittskontrolle von Personen
US 11,865,725 B2	Computer-assisted ascertainment of a movement of an apparatus
EP 3 921 996 B1	INTRUSION DETECTION IN COMPUTER SYSTEMS
EP 3 931 825 B1	VOICE CONTROL IN SANITARY AREAS
US 11,977,878 B2	System and method for managing software services in building customized software
CN 111831522 B	性能分析
EP 4 089 377 B1	METHOD FOR MONITORING THE STATE OF A DEVICE AND ASSEMBLY
EP 3 611 828 B1	DYNAMOELECTRIC ROTARY MACHINE WITH AIR GAP ENCAPSULATION
EP 4 238 199 B1	CIRCUIT BREAKER DEVICE AND METHOD
EP 4 431 890 B1	METHOD AND SYSTEM FOR RECALIBRATING PLURALITY OF SENSORS IN TECHNICAL INSTALLATION
DE 10 2024 201 202 B4	Schalter mit elektronischer Auslöseeinheit
US 12,058,254 B2	Method for storing key data in an electronic component
SG 11202111346 B	METHOD FOR MOVING A LOAD WITH A CRANE IN A COLLISION-FREE MANNER
EP 4 060 545 B1	DETERMINATION OF AN ACTIVITY OF AN ENCRYPTION OF A STORAGE DEVICE
AT 522413 B1	Vorrichtung und Verfahren zur Bestimmung von Abständen zwischen Wagenkästen und Fahrwerken von Fahrzeugen
AT 525480 B1	Versorgungsanschluss für eine Radlenkvorrichtung, Radlenkvorrichtung für ein Fahrwerk und Fahrwerk
DE 10 2024 202 459 B4	Verfahren zum Zuordnen von Stromwerten zu korrespondierenden Spannungswerten, Schaltungsanordnung und Einschub
US 12,684,348 B2	Network management in an internet-of-things (IOT) environment
EP 4 114 157 B1	ASSEMBLY FOR REDUNDANT CONTROL SYSTEM
CN 114430829 B	故障案例处理方法、系统和计算机可读介质
CN 113260929 B	用于故障安全数据传输的方法、网络节点、计算机程序和计算机可读介质
EP 4 116 854 B1	VERIFICATION OF SAFETY-RELEVANT PARAMETER VALUES
CN 113743614 B	用于使用最佳模型运行技术设施的方法和系统
US 12,493,629 B2	Device and method for adding equipment data into a distributed database system

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,809,900 B2	Method and system for migration of containers in a container orchestration platform between compute nodes
US 11,861,480 B2	Orientation detection in overhead line insulators
EP 4 507 220 B1	METHOD FOR PREVENTING FUNCTION BLOCKADE OF INTELLIGENT ELECTRONIC UNITS (IEDS)
CN 111831258 B	创建应用程序的方法和系统
US 11,837,864 B2	Pulse circuit for providing a fault current in a DC voltage power supply grid
EP 3 904 985 B1	TRACKING OF CHANGES IN PLANNING DATA OF A CONTROL SYSTEM OF A TECHNICAL INSTALLATION
AT 528743 B1	Rampensystem mit einem Handlauf für ein Fahrzeug
EP 4 006 498 B1	START-UP AND MAINTENANCE OF SENSOR AND MEASURING TRANSDUCER
US 11,937,404 B2	Pressing device
EP 4 519 915 B1	METHOD FOR PRODUCING A SEMICONDUCTOR MODULE HAVING AT LEAST ONE SEMICONDUCTOR ARRANGEMENT AND A HEATSINK
CN 113260935 B	对模块化技术系统进行计算机辅助仿真的方法和设备
US 12,519,357 B2	Rotor with permanent magnets
US 11,941,451 B2	Orchestration of containerized applications
CN 116648021 B	用于电路板的支架
CN 109558380 B	用于处理工业自动化环境中的工程对象的方法和系统
US 12,377,763 B2	Driver's seat for a rail vehicle
CN 113189388 B	一种电流传感器单元和电流检测电路
CN 112602257 B	具有电动马达和磁传动装置的电机
DE 10 2021 200 648 B4	Elektrischer Schalter mit einem regelbaren Widerstandselement
EP 4 143 808 B1	ASSISTANCE SYSTEM FOR A ROAD VEHICLE
EP 4 359 744 B1	TEMPERATURE MEASURING DEVICE FOR NON-INVASIVE TEMPERATURE MEASUREMENT, CALIBRATION METHOD, AND COMPUTER PROGRAMME PRODUCT
EP 3 753 205 B1	DATA TRANSMISSION IN TIME-SENSITIVE DATA NETWORKS
EP 4 125 253 B1	METHOD FOR TRANSMITTING TIME-CRITICAL DATA, COMMUNICATION SYSTEM AND COUPLING COMMUNICATION DEVICE
CN 110235130 B	增材扫掠的楔形构建工具路径
BR 112021005560 B1	MÉTODO PARA DETERMINAR VALORES DE ESTADO DE UMA RODA
EP 4 121 332 B1	ASSEMBLY FOR SUPPORTING A TORQUE
EP 4 425 282 B1	METHOD AND SYSTEM FOR AUTOMATICALLY DETECTING ERRORS IN INDUSTRIAL PLANT CONFIGURATION TABLES
US 12,353,201 B2	Method and arrangement for determining neighborhood relationships between an actuator and sensors in an installation
EP 4 035 969 B1	CONTROLLER, RAILWAY VEHICLE AND METHOD FOR TRAINING A CONTROLLER FOR A RAILWAY VEHICLE
US 12,499,006 B2	Functional safety high-speed counter module including diagnostics circuitry for performing counter pattern test
US 12,335,063 B2	Providing a service in a node of a cyber-physical system having at least two application modules
EP 4 158 499 B1	SYSTEM AND METHOD FOR FACILITATING ENGINEERING OF AN INDUSTRIAL SYSTEM
EP 3 853 098 B1	TAMPERPROOF GATE MECHANISM AND RAILROAD CROSSING GATE
US 12,499,294 B2	Method and system for provisioning simulation model generation in a cloud computing environment
CN 111742318 B	用于执行收缩线缆运动的模拟的方法和系统
DE 10 2023 205 572 B3	Virtual-Reality-unterstütztes Diagnoseverfahren für eine Anlage mit computerbasierter Auralisierung
US 12,216,448 B2	Dependability number
CN 114655854 B	吊具单元防撞方法、系统和起重机
EP 4 111 216 B1	SWITCHING DEVICE FOR A DC VOLTAGE NETWORK AND OPERATING METHOD FOR THE SWITCHING DEVICE
DE 10 2021 131 288 B4	Greifanordnung zum Anheben und Versetzen von Hebegut
EP 4 506 765 B1	SEQUENTIAL DATA ACQUISITION MODULE WITH INTEGRATED AI EVALUATION
US 12,034,328 B2	Method for controlling the current output of a battery
DE 10 2018 204 039 B4	Brandschutzschalter, Niederspannungsstromkreis und Verfahren für serielle Fehlerlichtbögen
US 12,650,669 B2	Control device for controlling a technical system, and method for configuring the control device
US 11,938,975 B2	Arrangement for driving a locomotive having various energy-provision systems
CN 114117655 B	用于估计轴承的剩余使用寿命的系统、装置和方法
CN 112584985 B	用于机器人仿真的仿真签名密钥
EP 4 226 749 B1	DEVICE FOR ENCLOSING A POWER UNIT AND FOR CENTERING A CONTROL UNIT RELATIVE TO THE POWER UNIT
US 12,126,230 B2	Method for producing a material layer with at least one recess
US 11,904,913 B2	Audio-based management of equipment onboard a train
US 12,482,739 B2	Arrangement for a semiconductor arrangement comprising at least one passive component and a substrate

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,461,510 B2	Universal data access across devices
DE 10 2022 210 728 B4	Gehäuse für einen Aktuator und Aktuator
CN 114945877 B	用于在客户端设备、服务器设备和多个自动化设备之间进行数据传输的系统
CN 114513153 B	用于运行三相电动机的方法
EP 4 377 184 B1	WATER SUPPLY SYSTEM FOR A RAIL VEHICLE
US 12,524,430 B2	Method, devices and system for data exchange between a distributed database system and devices
EP 3 974 236 B1	POWER LIMITER FOR RAILWAY VEHICLE WITH INTERNAL ENERGY STORAGE
EP 4 261 410 B1	WIND POWER PLANT WITH A BUSBAR ARRANGEMENT
CN 114977905 B	电机控制方法、装置及计算机可读存储介质
US 12,632,020 B2	Industrial control device, industrial control system and method of operating the same
IN 536214 B	AUTHENTICATING A DEVICE IN A COMMUNICATION NETWORK OF AN AUTOMATION INSTALLATION
US 12,511,773 B2	Wafer image denoising and contour extraction for manufacturing process calibration
EP 4 334 695 B1	METHOD FOR FITTING A MEASURING DEVICE ON A TUBE
EP 4 283 195 B1	CONTROLLING A MIXING RATIO
EP 3 787 924 B1	LATERAL SUPPORT SYSTEM AND OVERHEAD LINE SYSTEM
CN 113424420 B	具有简化的预充电电路的变频器
EP 4 082 869 B1	METHOD FOR CONTROLLING RAIL TRAFFIC OF A PLURALITY OF RAILWAY VEHICLES, COMPUTING UNIT AND COMPUTER PROGRAM
CN 110114769 B	语义比较产品配置模型的系统和方法
US 12,469,658 B2	Device for reversed handle operation of a circuit breaker
EP 4 127 994 B1	METHOD AND DEVICE FOR SECURELY STARTING A CONTAINER INSTANCE
DE 10 2023 200 487 B4	Innenschiebetür für ein Schienenfahrzeug mit einfahrbarer Abdeckung
EP 4 259 505 B1	MOUNTING INTERFACE AND BUFFER SYSTEM FOR A RAIL VEHICLE
US 11,859,425 B2	Double-leaf door device for a vehicle
US 12,172,320 B2	System, method and storage medium for production system automatic control
CN 115349220 B	功率转换器
EP 3 918 362 B1	A METHOD FOR COMPUTER-IMPLEMENTED SIMULATION OF RADAR RAW DATA
CN 110929435 B	3D打印中的圈闭支撑区域的空间感知检测
US 12,683,397 B2	Method for operating a network management system for a local energy network depending on a storage strategy of an energy store
CN 114008774 B	电子电路和用于制造电子电路的方法
US 12,420,612 B2	Air-conditioning device for use in a vehicle for passenger transport
AU 2024204205 B1	Gripping auto-adjusting rail clamp
CN 114556241 B	将人工智能(AI)集成到自动化中的可编程逻辑控制器(PLC)程序中功能块的AI伴侣
US 12,397,834 B2	End of train device with self-alignment and mounting integrity monitoring capabilities
EP 3 941 775 B1	VEHICLE WITH CURRENT COLLECTOR
EP 4 635 028 B1	A COMMUNICATION SYSTEM FOR WIRELESS TRANSMITTING A DATA SIGNAL FROM A TRANSMISSION DEVICE OF THE COMMUNICATION SYSTEM TO AT LEAST A FIRST RECEIVING DEVICE OF THE COMMUNICATION SYSTEM
EP 4 370 981 B1	METHOD AND SYSTEM FOR GENERATING USER SPECIFIC ENGINEERING PROGRAMS IN A MULTI-USER ENGINEERING ENVIRONMENT
US 12,153,906 B2	Method and system for generating engineering designs in an engineering system
IN 488968 B	REFRIGERATION ARRANGEMENT FOR A MOTOR VEHICLE
CN 112823318 B	用于计算开关的剩余寿命的方法和设备以及存储介质
EP 3 652 854 B2	ENERGY EFFICIENT ASYNCHRONOUS MACHINE
US 12,021,512 B2	Electronic switch as a damping element
CN 116584085 B	基于工业网络的工业软件无埋点追踪分析方法、装置
DE 10 2018 214 747 B4	Einrichtung für einen Niederspannungsstromkreis
CN 114779116 B	用于在IT系统中定位接地故障的方法
EP 4 365 811 B1	LOWERING POWER CONVERSION AND/OR GREENHOUSE GAS EMISSIONS
EP 4 011 102 B1	METHOD AND ARRANGEMENT FOR THE REPRESENTATION OF TECHNICAL OBJECTS
EP 3 916 939 B1	METHOD FOR LINE PROTECTION AND PROTECTION ARRANGEMENT
US 12,298,886 B2	Application program monitoring method and apparatus, and readable storage medium
EP 3 625 631 B1	METHOD FOR OPERATING A NUMERICAL CONTROLLED MACHINE TOOL AND MACHINE TOOL FOR SAME
CN 112309740 B	用于指令和信号设备的具有集成的接地功能的固定模块

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,511,295 B2	Method and system for dynamic exposition of manufacturing operation data from a data warehouse
EP 3 641 137 B1	DEVICE AND METHOD FOR PROCESSING DATA
AU 2022293912 B2	DEVICE AND METHOD FOR MONITORING TWO TIME BASES OF TWO COMMUNICATION DEVICES WITH THE AID OF A COMPUTER
EP 3 649 769 B1	METHOD FOR OPERATING A DATA NETWORK OF A VEHICLE, AND VEHICLE HAVING A DATA NETWORK
CN 111930079 B	数据采集方法、装置和系统、电子设备及存储介质
CN 110383273 B	增材制造中的散热支撑结构
EP 4 150 668 B1	SEMICONDUCTOR MODULE WITH A COOLING BODY
EP 4 053 973 B1	ENERGY STORAGE MODULE
MX 431499 B	MÉTODOS Y SISTEMAS PARA LA IDENTIFICACIÓN DE LA FUENTE DE UN FALLO, COMO UN FALLO DE ARCO O UN FALLO A TIERRA EN UN PANEL DE COMUNICACIÓN
CN 110275875 B	用于为工业基础设施提供经实例化的工业语义模型的方法和装置
KR 102581927 B1	측정 디바이스
US 11,837,869 B2	Power supply apparatus
EP 3 697 667 B1	METHOD FOR OPERATING RAIL VEHICLES WITH ABSOLUTE BRAKING DISTANCE
EP 3 778 349 B1	VEHICLE INFLUENCING SYSTEM, ROUTE CONTROL CENTRE AND OPERATING METHOD FOR A VEHICLE INFLUENCING SYSTEM
US 12,560,922 B2	Industrial plant and method for graphically representing synchronous relationships
IN 528574 B	EARTHING SWITCH INTERLOCK ARRANGEMENT
CN 116097628 B	使用数据质量指标来评估和修复数据的系统和方法
EP 3 783 545 B1	SYSTEM AND METHOD FOR AUTOMATICALLY CAPTURING TECHNOLOGY TRANSFER KNOWLEDGE
CN 115027902 B	安全控制装置的安装位置确定方法及装置
EP 4 356 493 B1	CONTROL OF ENERGY EXCHANGES BETWEEN A PLURALITY OF SYSTEMS CONNECTED TO A POWER SUPPLY
US 12,189,372 B2	System, device and method for managing and optimizing connection between field devices and automation devices
EP 4 147 104 B1	METHOD AND CONTROL UNIT FOR PROVIDING TRANSPORT DATA FOR CONTROLLING A TRANSPORT OF GOODS IN A PRODUCTION ENVIRONMENT AND PRODUCTION ENVIRONMENT
EP 3 916 638 B1	COMPUTER BASED DESIGN METHOD AND DESIGN SYSTEM
CN 114556237 B	用于测试自主交通工具的系统、设备以及方法
EP 4 466 149 B1	AIR-CONDITIONING DEVICE FOR USE IN A VEHICLE FOR PASSENGER TRANSPORT
US 11,961,010 B2	Method and apparatus for performing entity linking
CN 113767406 B	故障数据存储方法、装置、系统和计算机可读介质
EP 3 589 529 B1	SYSTEM AND METHOD FOR PROVIDING RAILROAD GRADE CROSSING STATUS INFORMATION TO AUTONOMOUS VEHICLES
CN 114829958 B	用于评估印刷电路板的方法和系统
US 12,050,459 B2	Anomaly detection method and apparatus for dynamic control system, and computer-readable medium
US 12,450,410 B2	Product state quantification and remaining life prediction method, and apparatus and system
CN 112313766 B	用于计算电气开关的接触状态的方法和利用这种方法的电气开关
US 12,429,858 B2	Method and apparatus for monitoring a condition of a component of a processing engineering plant
US 12,407,694 B2	Transmission device for transmitting data
US 12,085,663 B2	Method for determining a location of a user device in an industrial facility
CN 113434071 B	操作员选择的反注释
US 12,443,163 B2	Operating method for a machine tool, computer program product, control unit and machine tool
CN 110597698 B	用于分析至少一个异常的原因的方法
CN 116057508 B	在多个自治系统之间共享世界模型对象
CN 119984463 B	动态称重系统、积分仪的测量精度推荐方法、装置及设备
EP 4 332 806 B1	AUTOMATION CONTROLLER AND METHOD FOR OPERATING AN AUTOMATION CONTROLLER
CN 115017631 B	对组件的重复部件的变型进行建模的方法
IN 538426 B	REAL-TIME AND INDEPENDENT CYBER-ATTACK MONITORING AND AUTOMATIC CYBER-ATTACK RESPONSE SYSTEM
US 12,241,831 B2	Measuring facility and method for the measurement of at least two different components of a fluid
DE 10 2021 211 592 B4	Betriebsverfahren für ein Ventilsystem, Ventilsystem, Steuereinheit und Computerprogrammprodukt
CN 113168564 B	用于生成人工智能模型的方法和系统
US 12,399,486 B2	Engineering system and method of orchestrating engineering software for a factory automation environment
DE 10 2023 203 642 B3	Türsteuerverfahren zum Betreiben einer Türsteuervorrichtung für ein spurgebundenes Fahrzeug
EP 3 765 317 B1	METHOD FOR MONITORING AN AIR-CONDITIONING SYSTEM, MONITORING DEVICE AND AIR-CONDITIONING SYSTEM
EP 4 059 803 B1	RAILWAY TECHNOLOGY DEVICE FOR A RAILWAY SYSTEM AND METHOD FOR ITS OPERATION

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 11,789,705 B2	Method, computer program product and modeling tool for the reference model-based, component-related development of a technical system
EP 4 107 545 B1	METHOD FOR ESTIMATING AN INTRINSIC SPEED
EP 4 189 501 B1	METHOD FOR OFFLINE AND / OR ONLINE IDENTIFICATION OF A STATE OF A MACHINE TOOL, AT LEAST ONE OF ITS TOOLS OR AT LEAST ONE WORKPIECE MACHINED THEREIN
US 12,007,871 B2	Computer-implemented method for determining at least one quality attribute for at least one defect of interest
EP 3 877 816 B1	PRESSURE CONTROL IN A POWER NETWORK
US 12,217,919 B2	Electrical network having fault protection control
US 12,222,956 B2	Managing artifact information method and system
CN 115699100 B	提供合成标记的训练数据集的方法和系统及其应用
EP 3 990 321 B1	SLIDING COVER FOR RAIL VEHICLE EMERGENCY SWITCH
CN 113785605 B	认证方法及装置
CN 113302566 B	技术系统的上下文敏感的审计追踪
CN 111880068 B	用于控制功率半导体开关的电路装置和方法
US 11,947,882 B2	Optimization of prototype and machine design within a 3D fluid modeling environment
US 12,348,037 B2	Control apparatus and method for controlling a power consumption and/or a power output of an energy system, and low-voltage network
US 12,422,816 B2	Method for operating a numerically controlled production machine, and corresponding numerical control
CN 115579264 B	接触器的动触头支架组件及具有该组件的接触器装置
DE 10 2018 211 989 B4	Fahrzeug und Betriebsverfahren für ein Fahrzeug
US 12,333,703 B2	Self-supervised anomaly detection framework for visual quality inspection in manufactruing
JP 7374863 B2	トレースデータの取扱い
CN 114731305 B	通过外围设备远程激活控制设备的无线服务接口
DE 10 2024 202 815 B3	Befestigungsvorrichtung zur Befestigung eines Positionsgebers an einem stabförmigen Stellglied
IN 591929 B	COMPACT VACUUM INTERRUPTER
US 12,010,130 B2	Data capture apparatus with embedded security applications and unidirectional communication
EP 4 285 190 B1	CONTEXTUALISING EDITORS IN A PROCESS SYSTEM ENGINEERING SYSTEM
CA 3188729 C	SYSTEMS AND METHODS TO ASSESS AND REPAIR DATA USING DATA QUALITY INDICATORS
US 12,358,230 B2	Method and assembly for separating excess material from an additively manufactured component
IN 465542 B	METHOD FOR PROTECTING LINES, AND PROTECTION ASSEMBLY
US 12,063,313 B2	Signing system for validating stateful hash-based digital signatures
US 12,679,231 B2	Method, authentication means and authorization device for authorizing a charging process
CN 116520735 B	断路器的智能脱扣方法、计算机可读存储介质及断路器
EP 4 136 515 B1	METHOD, APPARATUS AND COMPUTER PROGRAM PRODUCT FOR MONITORING OF INDUSTRIAL DEVICES
EP 4 623 550 B1	METHOD AND TERMINAL FOR CRYPTOGRAPHICALLY SECURE TRANSMISSION OF DATA WITHIN A COMMUNICATION SYSTEM
US 12,311,990 B2	Grade crossing control system and method for determining track circuit impedance
EP 4 282 127 B1	METHOD FOR TRANSMITTING DATA BY MEANS OF AT LEAST TWO MOVING COMPONENTS, COMPUTER PROGRAM PRODUCT, TRANSMITTER AND RECEIVER
US 11,838,367 B2	Information acquiring method, apparatus, and system
US 12,211,629 B2	Contact system having reliable insulation
AU 2020480782 B2	SAFETY SYSTEM FOR AN ENCLOSURE
EP 4 190 089 B1	A METHOD FOR REGULATING TRANSMISSION OF A PLURALITY OF INDUSTRIAL DEVICES
EP 4 283 875 B1	METHOD FOR MONITORING A PLURALITY OF SHORT CIRCUIT-FORMING SIGNALLING ELEMENTS AND ARRANGEMENT FOR CARRYING OUT THE METHOD
EP 3 768 568 B1	RAIL VEHICLE HAVING A CONTROL DEVICE
IN 582364 B	SECURE DATA EXTRACTION FROM COMPUTING DEVICES USING UNIDIRECTIONAL COMMUNICATION
US 12,106,224 B2	Method and assistance system for assisting the planning of automation systems
CN 117140522 B	多轴协同控制方法、装置、电子设备和存储介质
US 12,111,649 B2	Security-relevant diagnostic messages
US 11,982,996 B2	Method and apparatus for configuring processing parameters of production equipment, and computer-readable medium
CN 113411005 B	车辆、特别是轨道车辆
EP 4 540 850 B1	MODULAR MULTI-POLE RAIL-MOUNTED DEVICE
US 12,430,481 B2	Method, computer program product and modeling tool for creating a system model, which represents a technical system to be developed, as a digital system twin

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
US 12,197,632 B2	Method and arrangement for outputting a head-up display on a head-mounted display
EP 4 269 169 B1	METHOD FOR DETECTING THE STATE OF A ROADSIDE OVERHEAD LINE SYSTEM
EP 4 011 458 B1	THERMAL TRIGGER DEVICE FOR AUTOMATIC CLOSING OF A FIRE DAMPER BASED ON A TRIGGERING SIGNAL OR A NON-TRIGGERING SIGNAL
CN 111869061 B	用于制造鼠笼式转子的方法
EP 3 888 998 B1	RAIL VEHICLE AND COVER ELEMENT FOR A RAIL VEHICLE
BR 112021003694 B1	MÉTODO PARA CONTROLAR A VELOCIDADE DE UMA MÁQUINATRIFÁSICA PERMANENTEMENTE EXCITADA, DISPOSITIVO DECONTROLE PARA UMA MÁQUINA TRIFÁSICA, E, MÁQUINATRIFÁSICA
EP 3 771 053 B1	ARCING FAULT MONITORING DEVICE, PARTICULARLY FOR LOW-VOLTAGE SWITCHGEAR
AT 526514 B1	Einrichtung zur Abdichtung eines Türportals eines Schienenfahrzeugs
US 12,601,408 B2	Control valve
CN 112703648 B	用于耦合两个直流电网的设备和方法
US 12,112,099 B2	Method and arrangement for creating a digital building model
IN 481922 B	METHOD AND SYSTEM FOR DISCLOSURE OF AT LEAST ONE CRYPTOGRAPHIC KEY
US 12,259,695 B2	Controller for controlling a technical system, and method for configuring the controller
US 12,437,943 B2	Short-circuit current limiter
CN 114222659 B	生成结构网格的方法、结构网格的使用方法、计算机程序和计算机可读介质
IN 586300 B	VACUUM INTERRUPTER
EP 4 372 948 B1	COMPUTER-IMPLEMENTED METHOD, COMPUTER-IMPLEMENTED TOOL AND POWER PLANT CONTROL DEVICE FOR ENERGY BALANCING SOLAR POWER PLANTS AND A SOLAR POWER PLANT SYSTEM
US 12,001,973 B2	Machine learning-based adjustments in volume diagnosis procedures for determination of root cause distributions
US 12,596,848 B2	Method of verifying integrity of data from a device under test
US 12,572,446 B2	Automatic assignment of changed permissions for diagnostic purposes for work container instances that have already been started
EP 3 696 693 B1	METHOD AND APPARATUS FOR MONITORING STATE OF DEVICE IN PROCESS INDUSTRY AND MEDIUM
EP 4 235 721 B1	SWITCHING DEVICE, VACUUM INTERRUPTER ASSEMBLY AND METHOD OF OPERATING A SWITCHING DEVICE FOR ELECTRIC POWER DISTRIBUTION
EP 4 367 496 B1	METHOD AND SYSTEM FOR GENERATING A TEST COUPON SPECIFICATION FOR PREDICTING FATIGUE LIFE OF A COMPONENT
US 11,907,057 B2	Fault processing method and system
CN 115258538 B	相位确定方法及装置、设备、存储介质
MX 429681 B	MECANISMO DE DISPARO DE BLOQUEO A PRUEBA DE FALLAS EN UN DISPOSITIVO DE INTERRUPCIÓN DE CIRCUITO
EP 4 339 845 B1	METHOD, APPARATUS AND ELECTRONIC DEVICE FOR DETECTING DATA ANOMALIES, AND READABLE STORAGE MEDIUM
US 12,290,936 B2	Stopping a production machine on a collision-free path
US 11,775,697 B2	Shoe design through 2.5-dimensional shoe models
CN 116097057 B	在计算机辅助设计 (CAD) 环境中执行产品组装件间隙分析的方法和系统
CN 113330374 B	用于基于设备的工程的数据同步系统
EP 3 814 194 B1	ENERGY OPTIMISATION DURING OPERATION OF A RAIL VEHICLE FLEET
EP 3 826 226 B1	METHOD OF REGISTERING TRAVEL FOR RAILWAY SYSTEM AND REGISTRATION PARTICIPANT
US 11,845,345 B2	Electrically driveable vehicle, in particular a rail vehicle
EP 4 367 484 B1	CALIBRATION METHOD FOR A FLOW MEASUREMENT SYSTEM, FLOW MEASUREMENT SYSTEM AND COMPUTER PROGRAM PRODUCT
EP 4 105 103 B1	SELF-ADJUSTING ENVIRONMENT DETECTING DEVICE FOR RAILWAY VEHICLES AND CORRESPONDING METHOD
EP 4 419 929 B1	ELECTRICAL SWITCHING DEVICE FOR HIGH VOLTAGE WITH INTEGRATED FAULT DETECTOR, METHOD FOR DETECTING A FAULT IN THE HIGH VOLTAGE SWITCHING DEVICE AND USE OF THE HIGH VOLTAGE SWITCHING DEVICE
US 12,430,480 B2	Method for automatically interpreting a piping diagram
US 12,549,383 B2	System and method for verifying components of an industrial monitoring system
EP 4 148 516 B1	METHOD FOR MAKING IT EASIER FOR A USER TO OPERATE AN INDUSTRIAL AUTOMATION SYSTEM AND PROCESS CONTROL SYSTEM
EP 4 289 165 B1	PROGRESSIVE WIRELESS SIGNAL QUALITY INDICATOR MAP REFINEMENT FOR WIRELESS NETWORKS
US 12,271,507 B2	Method and arrangement for exchanging a domain registrar for authenticating and configuring digital certificates
CN 114745912 B	焊机冷却方法、系统、焊机系统及计算机存储介质
CN 114342338 B	基于物联网模型的虚拟物联网设备生成方法及装置
EP 4 388 496 B1	METHODS AND SYSTEMS FOR GENERATING SEGMENTATION MASKS
CN 115917463 B	一种多参数的动态采样方法及其装置
AT 527805 B1	Befestigung für ein Kabelführungsrohr

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
CN 115642682 B	用于具有快切装置的电力系统的方法与装置
EP 4 566 040 B1	METHOD, SYSTEM, APPARATUS, ELECTRONIC DEVICE, AND STORAGE MEDIUM FOR EVALUATING WORK TASK
EP 4 266 175 B1	METHOD FOR COMPUTER-ASSISTED OPERATION OF A MEMORY UNIT AND EXECUTION OF APPLICATION PROGRAMS WITH MEMORY CHECK FOR MEMORY ERRORS
AT 526456 B1	Verfahren und Vorrichtung zur Detektion eines Entgleisungszustands eines Schienenfahrzeugs
CN 115856479 B	中低压开关柜的健康状况评估方法及装置
US 12,683,103 B2	Rapid safety switch and rapid safety switch system
EP 3 841 475 B1	METHOD AND APARATUS FOR VERIFYING A SOFTWARE SYSTEM
US 11,979,085 B2	DC/DC converter system and control method for full-bridge DC/DC converter
US 12,633,745 B2	Method and device for predicting an energy service offering and software program product
US 11,881,845 B2	Protective circuit for a semiconductor switch
US 12,214,811 B2	Anti-climbing device
CN 114514139 B	交通工具和运行交通工具的方法
CN 115956226 B	用于验证工业场景安全性的多状态模拟的方法和数据处理系统
AU 2023364283 B2	SMART BUILDING DATA CONNECTOR
EP 4 270 026 B1	SYSTEMS FOR SOURCE IDENTIFICATION OF A FAULT SUCH AS ARC FAULT OR GROUND FAULT EVENT IN A COMMUNICATING PANEL
US 12,299,951 B2	Edge center point-based characterization of semiconductor layout designs
EP 4 275 344 B1	A METHOD OF DETERMINING A BIT LENGTH OF AN IQ SAMPLE
JP 7362857 B2	フォーマルフォールト伝搬分析のためのシステム及び方法
EP 4 154 287 B1	FAULT DETECTION IN SPRING-LOADED DRIVES OF MEDIUM-VOLTAGE SWITCHGEAR SYSTEMS
CN 115519605 B	用于控制在切纸设备中传送的纸卷的方法及切纸设备
CN 112441027 B	交通工具和运行交通工具的方法
US 11,834,079 B2	Rail vehicle comprising a bogie cladding
CN 118743015 B	包括第一半导体元件和第一连接元件的半导体组件
EP 3 595 923 B1	METHOD AND DEVICE FOR MONITORING A DRIVE SYSTEM
CN 116438547 B	用于工程系统的知识图的逻辑规则归纳的系统
EP 4 062 245 B1	METHODS AND SYSTEMS FOR WORKPIECE QUALITY CONTROL
EP 4 334 167 B1	OVERHEAD LINE SYSTEM WITH A SKEWED PARALLEL ZONE
US 11,973,855 B2	PTP transparent clock with inter-VLAN forwarding
EP 3 943 360 B1	PNEUMATIC SPRING ASSEMBLY AND RUNNING GEAR
AT 526861 B1	Befestigungsanordnung für einen Geräteträger
CN 111566700 B	用于借助多任务学习确定对象在对象的周围环境中的姿势的方法和控制设备
EP 3 927 998 B1	ACTUATOR WITH A BELT SPRING ACTING AS A RETURN SPRING PREFERABLY DESIGNED AS CONSTANT-FORCE SPRING ACTING DIRECTLY ON A POSITIONING CONNECTION OF THE ACTUATOR
US 11,999,109 B2	Method and assembly for separating excess material from an additively manufactured component
CN 113748388 B	用于以计算机辅助的方式优化工具对库空间的占用的方法和设备
IN 577988 B	SENSOR DEVICE AND METHOD FOR RECORDING A CHANGE IN MAGNETIC FIELD
EP 4 128 522 B1	METHOD FOR OPERATING AN ASYNCHRONOUS MOTOR
CN 117280636 B	确定网络的部分中的驻留时间
US 12,182,487 B2	Controllable pattern clustering for characterized semiconductor layout designs
CN 112740540 B	用于运行具有转子和软起动器的永磁激励的三相电机的方法和三相电机
US 12,001,771 B2	Variant model-based compilation for analog simulation
EP 4 002 020 B1	METHOD AND SYSTEM FOR DETERMINING OPTIMAL OUTCOME IN A DYNAMIC ENVIRONMENT
DE 10 2023 202 803 B3	Elektronikanordnung
US 12,124,255 B2	Control system and method for representing alarm-driven trend progression diagrams during operator control and monitoring of a technical installation
CN 113132996 B	用于在重新配对时实现更高安全性的设备和方法
CN 110906333 B	混合器以及燃气燃烧系统
EP 3 656 049 B1	MONITORING DEVICE FOR A RELUCTANCE MACHINE AND METHOD FOR MONITORING
US 12,330,701 B2	Accurate detection of track occupancy within train tracking systems
EP 4 338 017 B1	SYSTEM AND METHOD FOR PERFORMING CLOSED LOOP SIMULATION IN AN IOT ENVIRONMENT
US 12,684,742 B2	Apparatus for enclosing a power unit and for centring a control unit with respect to the power unit
US 12,423,391 B2	Method for authenticating a user feature, and authentication device

© 2026 by Siemens AG, Berlin and Munich

Patent number	Title
EP 4 269 139 B1	HYDROGEN-POWERED RAILWAY VEHICLE WITH AN AIR CONDITIONING APPARATUS
US 12,273,259 B2	Method for operating a communication system, and communication system
US 12,326,481 B2	Method and system for modelling ultracapacitor
US 12,562,322 B2	Circuit breaker
US 11,904,916 B2	System and method for short vehicle detection
US 12,466,073 B2	Method for calibrating a robot
EP 4 313 720 B1	VEHICLE WITH A SENSOR ARRANGEMENT FOR MEASUREMENT OF AN ADJUSTMENT ANGLE OF THE ACTUATOR, MEASUREMENT ARRANGEMENT AND MEASUREMENT METHOD
US 11,849,718 B2	Particle having an antimicrobial surface, material for producing a coating using such particles, and method for producing such particles
US 11,914,350 B2	Manufacturing process control using constrained reinforcement machine learning
EP 4 065 799 B1	DOOR HAVING ADDITIONAL DOOR-OPERATING ELEMENTS
EP 4 542 516 B1	METHOD AND ARRANGEMENT FOR PROTECTING A CHARGING STATION AGAINST MISUSE
EP 4 068 176 B1	SYSTEM AND METHOD FOR MANUFACTURING A PRODUCT IN A DISTRIBUTED ENVIRONMENT
US 12,223,233 B2	Method and system for computer-aided design of a technical system
US 12,248,565 B2	Real-time and independent cyber-attack monitoring and automatic cyber-attack response system
CN 114636436 B	用于调试和维护传感器和测量变送器的方法
EP 4 113 482 B1	CONTROL ARRANGEMENT AND METHOD FOR CONTROLLING A CONTROL ARRANGEMENT
US 11,990,302 B2	Circuit breaker, removable display, and electronic trip unit for a circuit breaker
EP 3 969 974 B1	RING-CLOSURES IN FAULT TREES AND NORMALIZED REPRESENTATION
EP 3 969 973 B1	METHOD, APPARATUS, SYSTEM AND COMPUTER PROGRAM FOR DETERMINING HEALTH CONDITION OF A ROTATING SYSTEM
US 12,361,938 B2	Building automation system for controlling conditions of a room
US 12,626,205 B2	Method and system for semi-automatic completion of an engineering project
US 12,030,531 B2	Driver's compartment for an interoperable rail vehicle
CN 113794181 B	用于进行线路保护的方法和保护设备
DE 10 2022 205 097 B4	Verfahren, Busgerät und Systeme zur Ermittlung der Buslast in einem Bussystem
CN 116783401 B	用于覆盖长孔的垫圈
IN 583785 B	HOUSING FOR A VACUUM INTERRUPTER

© 2026 by Siemens AG, Berlin and Munich

SIEMENS

This compilation covers 4823 exemplary patents granted to Siemens AG and subsidiaries, excluding Siemens Healthineers AG and their respective subsidiaries, between September 2023 and July 2026.

The list is based on the availability of patent copies in public databases and may therefore not be entirely exhaustive. For patents granted by the EPO, the resulting protection in the EPC contracting states is not shown.

© 2026 by Siemens AG, Berlin and Munich