

Title (en)

DEVICE FOR ROTATABLY SUPPORTING A SECTION OF A SHAFT OF A ROLLER OF A CONVEYING SYSTEM, CORRESPONDING ASSEMBLY, CONVEYING SYSTEM AND APPARATUS FOR WET-CHEMICAL TREATMENT OF WORKPIECES

Title (de)

VORRICHTUNG ZUM DREHBAREN LAGERN EINES ABSCHNITTS EINER WELLE EINER ROLLE EINES FÖRDERSYSTEMS, ANORDNUNG, FÖRDERSYSTEM UND VORRICHTUNG ZUR NASSCHEMISCHEN BEHANDLUNG VON WERKSTÜCKEN

Title (fr)

DISPOSITIF DE SUPPORT ROTATIF D'UNE SECTION D'UN ARBRE DE ROULEAU DE SYSTÈME DE TRANSPORT, ENSEMBLE, SYSTÈME DE TRANSPORT ET APPAREIL DE TRAITEMENT CHIMIQUE DE PIÈCES PAR VOIE HUMIDE

Publication

EP 4321655 A1 20240214 (EN)

Application

EP 22189748 A 20220810

Priority

EP 22189748 A 20220810

Abstract (en)

A device for rotatably supporting a section of a shaft (4) of a roller (2) of a conveying system in a bath of an apparatus for wet-chemical treatment of workpieces comprises at least one body (14). A space for receiving the shaft section is formed in the at least one body (14). The space comprises a first section (17) having a cross-section, centred on a reference axis (15), of which a perimeter lies on a circle over at least a majority of the perimeter; and a second section (18), extending in axial direction from the first section (17) to an axial end of the space. The second section (18) has, at multiple, e.g. all, axial positions, a respective cross-section of which a boundary, at at least one particular angular position ($\varphi_{\text{sub}0}$), is at a radial distance to the reference axis (15) equal to a length (R_i) of the radius of the circle and has a radius of curvature extending from the reference axis (15) to the boundary. The respective cross-sections of the second section (18) have, over at least a range of angular positions ($[\varphi_{\text{sub}1}, \varphi_{\text{sub}1}]$) other than the particular angular positions ($\varphi_{\text{sub}0}$), a radial extent from the reference axis (15) that is increased with respect to the radial extent of the cross-section of the first section (17) at corresponding angular positions.

IPC 8 full level

C25D 17/06 (2006.01); **B65G 39/02** (2006.01); **H05K 3/00** (2006.01)

CPC (source: EP)

C23C 18/163 (2013.01); **C23C 18/1632** (2013.01)

Citation (applicant)

- CN 212668376 U 20210309 - UNIVERSAL PCB EQUIPMENT CO LTD
- CN 215491814 U 20220111 - UNIVERSAL PCB EQUIPMENT CO LTD
- WO 03069965 A1 20030821 - ATOTECH DEUTSCHLAND GMBH [DE], et al

Citation (search report)

- [X] JP 2009062569 A 20090326 - NISSHIN STEEL CO LTD, et al
- [IY] CN 201838616 U 20110518 - WUXI SUNTECH POWER CO LTD, et al
- [Y] CN 208353722 U 20190108 - GUANGZHOU FASTPRINT CIRCUIT TECH CO LTD, et al
- [Y] KR 101898167 B1 20180913 - POSCO [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4321655 A1 20240214; WO 2024033365 A1 20240215

DOCDB simple family (application)

EP 22189748 A 20220810; EP 2023071941 W 20230808