

Title (en)
HOT DIP GALVANIZING APPARATUS

Title (de)
ANLAGE FÜR DIE FEUERVERZINKUNG

Title (fr)
DISPOSITIF DE GALVANISATION À CHAUD

Publication
EP 3663429 A1 20200610 (DE)

Application
EP 20151616 A 20170313

Priority

- DE 102016007107 A 20160613
- DE 102016111725 A 20160627
- EP 17710526 A 20170313
- EP 2017055798 W 20170313

Abstract (en)
[origin: CA3026326A1] The invention relates to the technical field of galvanization of iron-based or iron-containing components, especially steel-based or steel-containing components (steel components), preferably for the automotive or motor vehicle industry, but also for other industrial fields of application (for example for the construction industry, the field of general mechanical engineering, the electrical engineering industry etc.), by means of hot galvanization (hot dip galvanization). More particularly, the invention relates to a method of hot galvanization (hot dip galvanization) and to a plant for this purpose, and additionally to a flux and flux bath usable in this connection and to the respective uses thereof, and additionally also to the products obtainable by the method and/or in the plant (i.e. hot galvanized iron or steel components).

Abstract (de)
Die Erfindung betrifft das technische Gebiet der Verzinkung von eisenbasierten bzw. eisenhaltigen Bauteilen, insbesondere stahlbasierten bzw. stahlhaltigen Bauteilen (Stahlbauteilen), vorzugsweise für die Automobil- bzw. Kraftfahrzeugindustrie, aber auch für andere technische Anwendungsgebiete (z. B. für die Bauindustrie, den Bereich des allgemeinen Maschinenbaus, die Elektroindustrie etc.), mittels Feuerverzinkung (Schmelztauchverzinkung). Insbesondere betrifft die Erfindung eine Anlage zur Feuerverzinkung (Schmelztauchverzinkung).

IPC 8 full level
C23C 2/02 (2006.01); **C23C 2/06** (2006.01); **C23C 2/26** (2006.01); **C23C 2/30** (2006.01)

CPC (source: EP US)
C23C 2/0038 (2022.08 - EP US); **C23C 2/024** (2022.08 - EP US); **C23C 2/06** (2013.01 - EP US); **C23C 2/26** (2013.01 - EP US); **C23C 2/30** (2013.01 - EP US)

Citation (applicant)

- WO 0242512 A1 20020530 - GALVA POWER GROUP N V [BE], et al
- EP 1352100 B1 20061122 - GALVA POWER GROUP N V [BE]
- DE 60124767 T2 20070524 - GALVA POWER GROUP N V [BE]
- US 2003219543 A1 20031127 - WARICHET DAVID [BE], et al

Citation (search report)

- [X] EP 2725115 A1 20140430 - FONTAINE HOLDINGS NV [BE]
- [X] WO 9504607 A1 19950216 - FERRO TECH INC [US], et al
- [I] DE 2317600 A1 19741024 - BASF AG
- [I] EP 1694880 A2 20060830 - UMICORE NV [BE]
- [X] ROELING: "Stahlbau Arbeitshilfe", 28 April 2010 (2010-04-28), XP055677329, Retrieved from the Internet <URL:http://bauforumstahl.de/upload/documents/publikationen/arbeits Hilfen/sta.01.4.pdf> [retrieved on 20200318]

Cited by
EP4328345A1; BE1030796A1

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

DOCDB simple family (publication)
DE 102016111725 A1 20171214; BR 112018075934 A2 20190409; BR 112018075934 B1 20230214; CA 3026326 A1 20171221; CA 3026326 C 20201110; CN 109477196 A 20190315; CN 109477196 B 20210219; EP 3445889 A1 20190227; EP 3445889 B1 20200729; EP 3663429 A1 20200610; ES 2818732 T3 20210413; HU E052348 T2 20210428; JP 2019518142 A 20190627; JP 6815494 B2 20210120; MA 49780 A 20210407; MX 2018015470 A 20191015; PL 3445889 T3 20210111; SI 3445889 T1 20210129; US 11499216 B2 20221115; US 2019144983 A1 20190516; WO 2017215796 A1 20171221

DOCDB simple family (application)
DE 102016111725 A 20160627; BR 112018075934 A 20170313; CA 3026326 A 20170313; CN 201780036941 A 20170313; EP 17710526 A 20170313; EP 20151616 A 20170313; EP 2017055798 W 20170313; ES 17710526 T 20170313; HU E17710526 A 20170313; JP 2019517140 A 20170313; MA 49780 A 20170313; MX 2018015470 A 20170313; PL 17710526 T 20170313; SI 201730480 T 20170313; US 201716309631 A 20170313