

Title (en)

CHARGING DEVICE, ESPECIALLY CHARGING STOCK PREHEATER

Title (de)

CHARGIERVORRICHTUNG, INSBESONDERE CHARGIERGUTVORWÄRMER

Title (fr)

DISPOSITIF DE CHARGEMENT, NOTAMMENT DISPOSITIF DE PRECHAUFFAGE DES CHARGES

Publication

EP 1687577 A1 20060809 (DE)

Application

EP 04803263 A 20041125

Priority

- EP 2004013355 W 20041125
- DE 10355549 A 20031127

Abstract (en)

[origin: WO2005052481A1] The aim of the invention is to allow for the troublefree charging of a crucible with scrap metal with different composition, such as light scrap and heavy scrap, from a lower outlet opening of a shaft-type charging device (1) by means of a pusher (13). For this purpose, the lateral faces of the pusher (13) are configured so as to converge from top to bottom and the actuator (2) of the pusher (13) is mounted in a frame construction (3) so as to be pivotable about a horizontal axis. The upper limit of the outlet opening for the charging stock from the shaft (2) is configured by a horizontal, pivoted roller (26), which preferably comprises catch elements (30) that are distributed across the peripheral surface thereof. Sections of the charging device that are subject to high mechanical stresses are configured by steel billet sections that are linked to give a constructional unit. The charging device is preferably configured as a charging stock preheater.

IPC 8 full level

F27D 13/00 (2006.01); **F27D 3/04** (2006.01); **F27D 3/06** (2006.01); **F27B 3/18** (2006.01)

CPC (source: EP KR US)

F27B 3/18 (2013.01 - KR); **F27D 3/00** (2013.01 - KR); **F27D 3/04** (2013.01 - EP KR US); **F27D 3/06** (2013.01 - EP US);
F27D 13/00 (2013.01 - KR); **F27D 13/002** (2013.01 - EP US); **F27B 3/186** (2013.01 - EP US); **Y10S 266/901** (2013.01 - EP US)

Citation (search report)

See references of WO 2005052481A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005052481 A1 20050609; AT E420330 T1 20090115; AU 2004293557 A1 20050609; AU 2004293557 B2 20071129;
BR PI0416996 A 20070206; CA 2546473 A1 20050609; CA 2546473 C 20100504; CN 100561093 C 20091118; CN 101514872 A 20090826;
CN 101514872 B 20120530; CN 1926397 A 20070307; DE 10355549 A1 20050623; DE 502004008838 D1 20090226; EA 008086 B1 20070227;
EA 200600923 A1 20061229; EP 1687577 A1 20060809; EP 1687577 B1 20090107; ES 2318357 T3 20090501; JP 2007513310 A 20070524;
JP 4343956 B2 20091014; KR 100777094 B1 20071119; KR 20060096159 A 20060907; PL 1687577 T3 20090630; PT 1687577 E 20090204;
SI 1687577 T1 20090430; UA 80926 C2 20071112; US 2007013112 A1 20070118; US 7497985 B2 20090303

DOCDB simple family (application)

EP 2004013355 W 20041125; AT 04803263 T 20041125; AU 2004293557 A 20041125; BR PI0416996 A 20041125; CA 2546473 A 20041125;
CN 200480035185 A 20041125; CN 200810189763 A 20041125; DE 10355549 A 20031127; DE 502004008838 T 20041125;
EA 200600923 A 20041125; EP 04803263 A 20041125; ES 04803263 T 20041125; JP 2006540375 A 20041125; KR 20067012733 A 20060623;
PL 04803263 T 20041125; PT 04803263 T 20041125; SI 200431031 T 20041125; UA A200607128 A 20041125; US 58066704 A 20041125