

Title (en)

STAVE PROTECTION SYSTEM

Title (de)

PLATTENKÜHLERSCHUTZSYSTEM

Title (fr)

SYSTÈME DE PROTECTION DE DOUVE

Publication

EP 4043589 A1 20220817 (EN)

Application

EP 22157392 A 20180315

Priority

- EP 22157392 A 20180315
- EP 18161931 A 20180315

Abstract (en)

A stave protection system for a metallurgical furnace comprises: a stave (100) comprising a plurality of recesses (110) arranged on a front face (102) of the stave (100); and a plurality of inserts (200) each being received by a respective one of the recesses (110), the inserts (200) so received projecting from the front face (102) of the stave (100) such that, in use, furnace burden material is trapped by the inserts (200) so as to provide a protective layer of the burden material on the front face (102) of the stave (100). Each insert (200) comprises a set of segments (202a-f) and a retainer which forces the segments (202a-f) against a surface (110b) of the respective recess (110), such that the segments (202a-f) are secured in the recess (110) by frictional contact with the surface (110b) of the recess (110).

IPC 8 full level

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CPC (source: CN EP KR)

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C21C 5/4646 (2013.01 - EP); **F27D 2009/0032** (2013.01 - EP KR); **F27D 2009/0045** (2013.01 - EP KR)

Citation (applicant)

WO 2009147192 A1 20091210 - WURTH PAUL SA [LU], et al

Citation (search report)

- [A] US 4528672 A 19850709 - MORGAN II JOHN W [US], et al
- [A] JP 2011157565 A 20110818 - JFE STEEL CORP
- [A] US 2004229001 A1 20041118 - HYDE DEAN R [GB], et al
- [A] WO 03029114 A1 20030410 - METSO MINERALS TRELLEBORG AB [SE], et al

Designated contracting state (EPC)

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DOCDB simple family (publication)

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EP 4043589 A1 20220817; EP 4043589 B1 20230830; JP 2021518522 A 20210802; JP 7237977 B2 20230313; KR 20200132867 A 20201125;
WO 2019175245 A1 20190919

DOCDB simple family (application)

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