

Title (en)

COOLING PANELS FOR BLAST FURNACES

Publication

**EP 0142399 B1 19890816 (FR)**

Application

**EP 84401858 A 19840919**

Priority

FR 8315014 A 19830921

Abstract (en)

[origin: US4669708A] The cooling plate 1 comprises a cast iron element having substantially the shape of a parallelepiped, embedded longitudinally extending tubes 3; 103 disposed vertically and parallel to one another and extending out of said element on a first side 2b; 102b of said element, and a protective sleeve 4a, 4b surrounding portions of said tubes extending out of said element. A second side of said element opposed to said first side has a waffle shape formed by rows of bosses 8; 108 evenly spaced apart transversely of said element. The bosses of a row define projecting surfaces 9; 109 comprising substantially aligned portions of a cylinder, said cylinders having axes substantially coinciding with axes of said tubes 3.

IPC 1-7

**C21B 7/10**

IPC 8 full level

**C21B 7/10** (2006.01); **F27D 1/12** (2006.01); **F27D 9/00** (2006.01)

CPC (source: EP US)

**C21B 7/10** (2013.01 - EP US); **F27D 1/12** (2013.01 - EP US); **F27D 2009/0048** (2013.01 - EP US); **F27D 2009/0051** (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

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**US 84393486 A 19860324**; AT 84401858 T 19840919; DE 3479430 T 19840919; EP 84401858 A 19840919; FR 8315014 A 19830921