

Title (en)
Cooling plates for shaft furnaces

Title (de)
Kühlplatten für Schachtöfen

Title (fr)
Plaques de refroidissement pour fours à cuve

Publication
EP 0741190 B1 20010912 (DE)

Application
EP 96106335 A 19960423

Priority
• DE 19516535 A 19950505
• DE 19545048 A 19951202

Abstract (en)
[origin: EP0741190A1] Cooling plates, for a refractory-lined shaft (esp. blast) furnace, are mfd. from a forged or rolled copper or lean copper alloy ingot and have internal coolant channels in the form of a vertical blind bores with opt. additional smaller dia. vertical and horizontal blind bores at the plate edge or with an attached cooling segment having vertical blind bores connected at the ends to respective horizontal blind bores. The novelty is that: (a) one cooling plate (1) has horizontal and/or vertical side flanges (5, 7) and is provided with horizontal webs (9) and grooves (10), facing the furnace interior, on the body portion (3) between the flanges (5, 7); and (b) another cooling plate has vertical and/or horizontal side flanges and is provided with horizontal webs and grooves, facing the furnace interior, on its body portion and on the side flanges.

IPC 1-7
C21B 7/10

IPC 8 full level
C21B 7/10 (2006.01); **F27B 1/24** (2006.01); **F27D 1/12** (2006.01)

CPC (source: EP US)
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Cited by
EP1344838A3; EP0918092A1; CN1080314C; DE19727008C1; EP0887428A1; US6132673A; CN1073161C; DE19727008C2

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