

Title (en)

SYSTEMS AND METHODS OF COOLING BLAST FURNACES

Title (de)

SYSTEME UND VERFAHREN ZUM KÜHLEN VON HOCHÖFEN

Title (fr)

SYSTEMES ET PROCEDES DE REFROIDISSEMENT DE HAUTS FOURNEAUX

Publication

EP 1836324 A2 20070926 (EN)

Application

EP 05854686 A 20051220

Priority

- US 2005046017 W 20051220
- US 63700604 P 20041220

Abstract (en)

[origin: WO2006069019A2] Systems and methods provide a cooling device for a blast furnace that may prevent an excessive amount of coolant from entering the blast furnace and may be easily installed in a conventional blast furnace. Systems and methods may provide a cooling device for a blast furnace that may prevent an excessive amount of coolant from entering the blast furnace and may be simple and cost effective to manufacture.

IPC 8 full level

C21B 7/10 (2006.01); **F27B 1/24** (2006.01); **F27D 1/12** (2006.01); **F27D 9/00** (2006.01)

CPC (source: EP US)

C21B 7/10 (2013.01 - EP US); **F27B 1/24** (2013.01 - EP US); **F27D 1/12** (2013.01 - EP US); **F27D 9/00** (2013.01 - EP US); **F28D 15/02** (2013.01 - EP US); **F28D 15/0233** (2013.01 - EP US); **F27D 2009/0018** (2013.01 - EP US); **F27D 2009/0048** (2013.01 - EP US); **F27D 2009/0062** (2013.01 - EP US)

Citation (search report)

See references of WO 2006069019A2

Citation (examination)

US 4537247 A 19850827 - OKAMOTO EIJI [JP], et al

Cited by

CN109931795A

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2006069019 A2 20060629; **WO 2006069019 A3 20060803**; BR PI0519147 A2 20081230; CA 2591584 A1 20060629; EP 1836324 A2 20070926; MX 2007007369 A 20080416; US 2008111287 A1 20080515

DOCDB simple family (application)

US 2005046017 W 20051220; BR PI0519147 A 20051220; CA 2591584 A 20051220; EP 05854686 A 20051220; MX 2007007369 A 20051220; US 79267405 A 20051220