

Title (en)

LIQUID-COOLED CANTILEVER SUPPORT SHELF FOR UPPER TIERS OF REFRACTORY BRICK WALLS

Title (de)

FLÜSSIGKEITSGEKÜHLTES KRAGARMREGAL FÜR OBERE ETAGEN VON FEUERFESTEN ZIEGELWÄNDEN

Title (fr)

TABLETTE DE SUPPORT EN PORTE-À-FAUX AVEC REFROIDISSEMENT LIQUIDE POUR LES ÉTAGES SUPÉRIEURS DE MURS EN BRIQUES RÉFRACTAIRES

Publication

**EP 3752781 A4 20201223 (EN)**

Application

**EP 18937057 A 20181014**

Priority

US 2018055784 W 20181014

Abstract (en)

[origin: WO2020081041A1] At least one row of fixed copper coolers are arranged in a furnace in a cantilevered horizontal shelf inside and fastened to an external steel ring support and the steel containment shell. These shelves redirect and take all the weight of refractory brick and floating cooling blocks that are stacked on above. Each fixed copper cooler in the shelves cantilever shoulder-to-shoulder over any refractory brick and floating cooling blocks that may be stacked beneath to relieve that lower portion of the wall from the weight of the upper wall. When relieved of such weight, the risks of sudden catastrophic failure of the lower walls is reduced. These bricks in the lower walls can also be allowed to wear and thin beyond what would be reasonable in a conventional design without any cantilevered shelving.

IPC 8 full level

**F27D 1/12** (2006.01); **C22B 5/12** (2006.01); **F27B 1/24** (2006.01); **F27D 1/00** (2006.01); **F27D 1/14** (2006.01)

CPC (source: EP)

**F27B 1/24** (2013.01); **F27D 1/00** (2013.01); **F27D 1/12** (2013.01); **F27D 1/14** (2013.01)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2020081041A1

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**WO 2020081041 A1 20200423**; AU 2018446161 A1 20200827; AU 2018446161 B2 20210506; CA 3092672 A1 20200423; CA 3092672 C 20210413; EP 3752781 A1 20201223; EP 3752781 A4 20201223; EP 4202340 A1 20230628; ZA 202004682 B 20220126

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