

Title (en)

WEAR RESISTANT SINGLE PENETRATION STAVE COOLERS

Title (de)

VERSCHLEISSFESTE EINLOCH-KÜHLPLATTE

Title (fr)

REFROIDISSEURS À DOUVES À PÉNÉTRATION UNIQUE RÉSISTANTS À L'USURE

Publication

**EP 3710768 B1 20231004 (EN)**

Application

**EP 18879480 A 20180914**

Priority

- US 201715815343 A 20171116
- US 201815968272 A 20180501
- US 201816101418 A 20180811
- US 2018051231 W 20180914

Abstract (en)

[origin: WO2019099097A1] All of a cast-iron or cast-copper stave cooler's weight is supported inside a furnace containment shell by single gas-tight steel collar on the backside. All the coolant piping in each cooler has every external connection collected and routed together through the one steel collar. A wear protection barrier is disposed on the hot face. Such is limited to include at least one of horizontal rows of ribs and channels that retain metal inserts or refractory bricks, or pockets that assist in the retention of castable cement and/or accretions frozen in place from a melt, or an application of an area of hardfacing that is welded on in bead, crosshatch, or weave pattern.

IPC 8 full level

**F28D 1/047** (2006.01); **F27B 1/24** (2006.01); **F27D 1/00** (2006.01); **F27D 1/12** (2006.01); **F27D 9/00** (2006.01)

CPC (source: EP KR)

**F27B 1/24** (2013.01 - EP KR); **F27D 1/12** (2013.01 - EP KR); **F27D 9/00** (2013.01 - EP KR); **F28D 1/047** (2013.01 - KR);  
**F27D 2009/0021** (2013.01 - EP KR); **F27D 2009/0062** (2013.01 - EP KR); **F28D 1/047** (2013.01 - EP); **F28D 2021/0057** (2013.01 - EP KR)

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DOCDB simple family (publication)

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