Title (en)

BLAST FURNACE WALL-COOLING STAVES

Title (de)

WANDKÜHLUNGSDAUBEN FÜR HOCHOFEN

Title (fr)

DOUVES DE REFROIDISSEMENT DE PAROI DE HAUT FOURNEAU

Publication

EP 3950967 A1 20220209 (EN)

Application

EP 20776450 A 20200325

Priority

- JP 2019059836 A 20190327
- JP 2020013231 W 20200325

Abstract (en)

Provided is a wall-cooling stave for a blast furnace provided with a liner in an inside of the furnace, which can prevent the temperature rising of the liner to prolong the service life of the liner. The wall-cooling stave for the blast furnace comprises a stave body 1 provided in its interior with a water channel passing a cooling water therethrough and made from copper or a copper alloy, a plurality of horizontal grooves 13 formed on a surface side of the stave body facing the inside of the furnace to constitute concave portions formed of the plurality of horizontal grooves and convex portions formed between the plurality of horizontal grooves, a plurality of vertical grooves 4 formed in the convex portions between the horizontal grooves in a vertical direction, and a plurality of liners 2 formed so as to fit into the horizontal grooves in the stave body and protrude at their tops into the inside of the furnace, in which gaps 5 in a vertical direction between the plurality of liners is located at positions different from the vertical grooves 4 in the horizontal direction.

IPC 8 full level

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

CPC (source: EP KR)

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