

Title (en)

HEAT RECOVERY ON STEEL SLAG

Title (de)

WÄRMERÜCKGEWINNUNG AUF STAHLSCHLACKE

Title (fr)

RÉCUPÉRATION DE CHALEUR SUR LAITIER D'ACIER

Publication

**EP 4159878 A1 20230405 (EN)**

Application

**EP 21199716 A 20210929**

Priority

EP 21199716 A 20210929

Abstract (en)

An industrial installation (1) for waste radiative heat recovery from steel slag, said installation (1) being located above a pit (2) in which molten steel slag is discharged and from which solidified steel slag is removed, using a slag conveying machine or vehicle. This installation includes :- an evaporating device (3) for producing hot water and steam and auxiliary equipment, said evaporating device comprising a heat exchanger (6) under the form of tube-cooled walls ; - a steel structure (4) supporting said evaporating device ; characterized in that the installation further comprises a lifting system using jacks (5), so that the heat exchanger (6) under the form of tube-cooled walls can be moved vertically from an upper standby position to a lower working position and vice versa. The link between fixed and moving water circuits is performed thanks to flexible hoses.

IPC 8 full level

**C21B 3/08** (2006.01)

CPC (source: EP)

**C21B 3/08** (2013.01); **C21B 2400/022** (2018.08); **C21B 2400/07** (2018.08); **C21B 2400/08** (2018.08)

Citation (applicant)

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- JP 5560871 B2 20140730
- EP 2660338 B1 20190403 - POSCO [KR], et al
- HUI ZHANG ET AL.: "Applied Energy", vol. 112, 2013, ELSEVIER, article "A review of waste heat recovery technologies towards molten slag in steel industry", pages: 956 - 966

Citation (search report)

- [A] CN 103981307 A 20140813 - HUATIAN NANJING ENGINEERING & TECHNOLOGY CORP MCC
- [A] CN 112899416 A 20210604 - ENERGY SAVING AND ENVIRONMENTAL PROT CO LTD MCC GROUP, et al
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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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