

Title (en)

COMBINED WELDING AND ROLLING PLANT FOR METALLIC STRIPS

Title (de)

KOMBINIERTE SCHWEISS- UND WALZANLAGE FÜR METALLBÄNDER

Title (fr)

INSTALLATION COMBINÉE DE SOUDAGE ET DE LAMINAGE DE BANDES MÉTALLIQUES

Publication

EP 3208005 A1 20170823 (EN)

Application

EP 17156641 A 20170217

Priority

IT UB20160862 A 20160218

Abstract (en)

A metallic strip continuous rolling plant comprising, in sequence: - at least two first reels (1) sized to receive coils having a predetermined weight limit or a coil diameter limit; - a welding line provided with at least one first welder (2) for making a rollable weld seam between each coil and the next coil; - a cold rolling mill (9) having at least three rolling stands (19) arranged in tandem; - at least one second reel (11, 11') sized to wind rolled strip portions up to said predetermined weight limit or said coil diameter limit; in which cutting means are arranged between said rolling mill (9) and said at least one second reel (11, 11'), which are adapted to cut the rolled strip each time a portion of rolled strip wound on the at least one second reel (11, 11') reaches said predetermined limit; in which a rotating platform (3) is provided between the welding line and the rolling mill (9), which is adapted to rotate about a vertical axis and is provided with a third reel (4) and a fourth reel (5), which are positioned on said platform (3) so that alternatively the third reel (4) is used as winding reel of the strip coming from the welding line, and the fourth reel (5) is used as strip unwinding reel for feeding the rolling mill (9), and in which the third reel (4) and the fourth reel (5) are sized to wind a coil weighing from 80 to 200 metric tons and/or with a diameter of up to 6 meters, defined mega coil, made by said welding line.

IPC 8 full level

B21B 1/28 (2006.01); **B21B 15/00** (2006.01)

CPC (source: CN EP)

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Citation (search report)

- [Y] DE 2606301 A1 19760909 - HITACHI LTD
- [Y] DE 1452440 A1 19690417 - SIEMAG SIEGENER MASCH BAU
- [Y] US 6009736 A 20000104 - GINZBURG VLADIMIR B [US]
- [Y] US 3898436 A 19750805 - POTTEBAUM RAYMOND J, et al

Cited by

US2023330728A1

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

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EP 3208005 A1 20170823; **EP 3208005 B1 20200129**; CN 107088580 A 20170825; CN 107088580 B 20200515; IT UB20160862 A1 20170818; JP 2017148869 A 20170831; JP 6514249 B2 20190515

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