

Title (en)

DEVICE AND SYSTEM FOR SEPARATING AND PACKAGING STEEL SLIT COILS

Title (de)

VORRICHTUNG UND SYSTEM ZUM TRENNEN UND VERPACKEN VON SPALTSPULEN AUS STAHL

Title (fr)

DISPOSITIF ET SYSTÈME DE SÉPARATION ET D'EMBALLAGE DE BOBINES REFENDUES EN ACIER

Publication

EP 3980339 A4 20230823 (EN)

Application

EP 20818423 A 20200605

Priority

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Abstract (en)

[origin: WO2020247767A1] A packaging system for separating and packaging steel slit coils (10) includes a coil transport system (13) for separating steel slit coils (12) into packaging groups, an automated packaging system (26) for packaging the groups, a separator device (44) configured for positioning at one end of each packaged group, and a rotator system (30) for stacking the packaged groups on top of each other. The separator device (44) facilitates distinguishing the packaged groups when the packaged groups are stacked on top of each other. The separator device (44) includes an arcuate outer body (46), an arcuate inner body (49) extending within the outer body (46), and a plurality of arms (48) connecting the outer body (46) and the inner body (49), with a groove (60) defined in each arm (48).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [XAY] US 4783905 A 19881115 - HASENKAMP FRIEDERICH [DE]
- [Y] JP 2007106432 A 20070426 - JFE STEEL KK, et al
- [Y] CN 104709489 A 20150617 - SHANGHAI BAOSTEEL IND COMPANY, et al
- [Y] US 3699880 A 19721024 - NUCKEL NORBERT
- [A] US 3447227 A 19690603 - WOLLAM CARL ARLEN
- [A] US 4498276 A 19850212 - REED GEOFFREY R [GB]
- [A] US 2010172729 A1 20100708 - MARCELLI PIERRE [FR], et al
- [A] US 6585475 B1 20030701 - MARCELLI PIERRE [FR]
- See also references of WO 2020247767A1

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