

Title (en)
APPARATUS AND METHOD FOR IMPARTING SELECTED TOPOGRAPHIES TO ALUMINUM SHEET METAL AND APPLICATIONS THERE FOR

Title (de)
VORRICHTUNG UND VERFAHREN ZUM EINPRÄGEN AUSGEWÄHLTER TOPOGRAFIEN IN EIN ALUMINIUMBLECH UND ANWENDUNGEN DAFÜR

Title (fr)
APPAREIL ET PROCÉDÉ DE COMMUNICATION DE TOPOGRAPHIES SÉLECTIONNÉES À UN MÉTAL EN FEUILLE D'ALUMINIUM ET APPLICATIONS POUR CEUX-CI

Publication
EP 2919925 A4 20160803 (EN)

Application
EP 13853281 A 20131108

Priority
• US 201213673468 A 20121109
• US 201313892028 A 20130510
• US 2013069188 W 20131108

Abstract (en)
[origin: WO2014074844A1] A material handler formed from isotropic textured aluminum sheet rolled by rolls indented with spherical media, such as steel ball bearings, producing a sheet with a low coefficient of friction relative to particulate matter like flour. The slippery sheeting may be used to make tanks, silos, conduits and guides to facilitate storage and flow of the particulate matter.

IPC 8 full level
B21B 1/22 (2006.01); **B21B 27/00** (2006.01); **B21H 8/00** (2006.01); **B24C 1/06** (2006.01); **B65D 88/28** (2006.01); **B65D 90/64** (2006.01); **C21D 7/06** (2006.01)

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Citation (search report)
• [Y] US 2986193 A 19610530 - PAT HOWELL
• [Y] WO 9507774 A1 19950323 - SIDMAR NV [BE], et al
• [Y] DE 19947696 A1 20010405 - LESK ADOLF [DE]
• [A] EP 0279773 A2 19880824 - BENECKE GMBH J [DE]
• [A] PAWELSKI O ET AL: "EINFLUSS UNTERSCHIEDLICHER ARBEITSWALZEN-AUFRAUHVVERFAHREN AUF DIE OBERFLÄCHENFEINSTRUKTUR BEIM NACHWALZEN VON KAROSSERIEBLECHEN", STAHL UND EISEN, VERLAG STAHL EISEN, DUSSELDORF, DE, vol. 114, no. 6, 13 June 1994 (1994-06-13), pages 183 - 188,305, XP000448210, ISSN: 0340-4803
• See also references of WO 2014074844A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
WO 2014074844 A1 20140515; BR 112015010578 A2 20170711; CA 2890916 A1 20140515; CA 2890916 C 20210406; CN 105377456 A 20160302; DK 2919925 T3 20190520; EP 2919925 A1 20150923; EP 2919925 A4 20160803; EP 2919925 B1 20190227; ES 2727954 T3 20191021; HR P20190914 T1 20190726; KR 102220796 B1 20210226; KR 20160146489 A 20161221; PL 2919925 T3 20191129; RU 2015121945 A 20170110; RU 2676118 C2 20181226; SA 515360409 B1 20191003; SI 2919925 T1 20190830; TW 201436895 A 20141001

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US 2013069188 W 20131108; BR 112015010578 A 20131108; CA 2890916 A 20131108; CN 201380067360 A 20131108; DK 13853281 T 20131108; EP 13853281 A 20131108; ES 13853281 T 20131108; HR P20190914 T 20190516; KR 20157013854 A 20131108; PL 13853281 T 20131108; RU 2015121945 A 20131108; SA 515360409 A 20150509; SI 201331456 T 20131108; TW 102140921 A 20131111