

Title (en)

UNWINDING APPARATUS FOR A SELF-PROPELLED WRAPPING MACHINE

Title (de)

ABWICKELVORRICHTUNG FÜR EINE SELBSTANGETRIEBENE VERPACKUNGSMASCHINE

Title (fr)

APPAREIL DE DÉVIDAGE DESTINÉ À UNE MACHINE D'EMBALLAGE AUTOMOTRICE

Publication

**EP 3070003 A1 20160921 (EN)**

Application

**EP 16160729 A 20160316**

Priority

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Abstract (en)

An unwinding apparatus for a self-propelled wrapping machine (100) mobile around a load for wrapping the latter with a plastic material film (50), comprises frame means (2) for supporting a reel (60) of film (50); roller means (11, 12, 13, 14, 15) for unwinding and pre-stretching the film (50); at least one folding element (3) mobile along a narrowing trajectory (R) for abutting a first longitudinal edge (50a) of the film (50) and pushing the latter towards a second longitudinal edge (50b) of the film (50) so as to reduce a strip width (L) of film (50) exiting the apparatus (1); driving means (10) for moving the folding element (3) and comprising moving means (4; 104) supporting the folding element (3) and mobile along the narrowing trajectory (R); electric actuator means (5) connected to, and driving, the moving means (4; 104); a control unit (20) connected to the driving means (10) for adjusting a displacement and/or a moving direction of the moving means (4; 104); the wrapping apparatus (1) also comprises first sensor means (30; 130) coupled to the moving means (4; 104) for continuously detecting and measuring at least a displacement of the moving means and sending a related signal to the control unit (20) so as to control and adjust during wrapping the load a position of folding element (3) along the narrowing trajectory (R) and thus the strip width (L) of film (50).

IPC 8 full level

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Citation (search report)

- [Y] US 2007204565 A1 20070906 - LANCASTER PATRICK R III [US], et al
- [Y] DE 102006058735 A1 20080619 - ERAPA LENZEN GMBH & CO KG [DE]
- [A] EP 0466980 A1 19920122 - PROCTER & GAMBLE [US]
- [YA] EP 1459982 A1 20040922 - HALOILA M OY AB [FI]
- [YA] WO 2013171354 A1 20131121 - ARANGUREN COM DEL EMBALAJE S L [ES]
- [YA] WO 2012153265 A1 20121115 - ROBOPAC SPA [SM], et al
- [A] JP 2004051227 A 20040219 - YAMAZAKI YUJI
- [A] US 4807427 A 19890228 - CASTEEL LARRY L [US], et al
- [A] US 2009235617 A1 20090924 - MOORE PHILIP R [US], et al
- [A] US 6360512 B1 20020326 - MAROIS YANICK [CA], et al
- [A] DE 9012589 U1 19901115
- [A] EP 2749498 A1 20140702 - RAYMOND CORP [US]
- [A] EP 2604533 A1 20130619 - ATLANTA STRETCH S P A [IT]
- [A] FR 2942776 A1 20100910 - DEO WRAP SERVICE [FR]

Cited by

IT201800005700A1; IT201800007119A1; CN112533831A; CN111137488A; IT201800010079A1; IT201800005787A1; CN112236365A; IT202100019820A1; US11767136B1; CN108609214A; IT201700046194A1; US2022348373A1; US11661226B2; IT202100019655A1; US11377240B2; US11780628B1; WO2020165721A1; WO2020095338A1; US11970296B2; US11801953B2; US11958642B1; WO2023007353A1; WO2019229608A1; US11912452B1; WO2020012327A1; WO2024003852A1; WO2023002408A1

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