

Title (en)  
Device for unwinding stretchable plastic film

Title (de)  
Vorrichtung zum abwickeln von dehnbarer Kunststoffolie

Title (fr)  
Dispositif pour dérouler un film plastique étirable

Publication  
**EP 1213223 A1 20020612 (EN)**

Application  
**EP 01103118 A 20010209**

Priority  
IT MI20002446 A 20001114

Abstract (en)  
The invention relates to an unwinding unit for extendable plastic film (P), in particular in a pallet-wrapping machine, comprising at least one pair of motorized unwinding and pre-stretching rollers (6,7) and at least one guide roller (10) mounted on at least one substantially rigid support arm (13) associated with means (17) for sensing the force applied onto the guide roller (10) by the tension of the film being unwound. According to the invention, said support arm (13) extends, beyond its pivoting axis, parallel to the axis of the respective guide roller, in the form of a pressure lever (16), the free end of which rests, in a "floating" manner, on the load sensor (17). Preferably, said support arm is mounted aligned in the plane lying between its pivoting axis and the axis of rotation of the unwinding unit. Moreover, an additional guide roller (11) is provided downstream of the guide roller mounted on said support arm (13), having the function of an exit roller (11) for the film from the unwinding unit. <IMAGE>

IPC 1-7  
**B65B 11/04**

IPC 8 full level  
**B65B 11/04** (2006.01); **B65B 11/00** (2006.01)

CPC (source: EP)  
**B65B 11/045** (2013.01); **B65B 2011/002** (2013.01)

Citation (applicant)  
• IT 1179310 A  
• IT 1293829 A  
• IT 1278195 A

Citation (search report)  
• [XY] US 5123230 A 19920623 - UPMANN HUBERT [DE]  
• [YA] EP 0936141 A1 19990818 - HALOILA M OY AB [FI]  
• [YA] US 4840006 A 19890620 - HUMPHREY JOHN R [US]  
• [A] US 4458467 A 19840710 - SHULMAN MICHAEL H [CA], et al  
• [A] DE 4234604 A1 19940421 - HAGEMANN B GMBH & CO [DE]

Cited by  
ES2341209A1; EP2463202A3; EP2463203A3; US2011210471A1; US8747713B2; CN102459004A; EP3219628A1; ITUA20161827A1; WO2010138282A1; WO2007100598A3; US11479378B2; US7707801B2; US8141327B2; US9187193B2; US8079201B2; US8250838B2; US8448412B2; US10005581B2; US11111046B2; US11174056B2; WO2015036807A1; WO2008007189A3; WO2013171354A1; EP2607245A3; EP3838773A1; EP4056483A1; US9290282B2; US9908648B2; US10173795B2; US7568327B2; US11472580B2; US9776748B2; US10239645B2; US10717554B2; US11407538B2; US11518558B2; US11912445B2; US10227152B2; US11597554B2; US11667416B2; US11685567B2; US7779607B2; US8037660B2; US8276346B2; US8276354B2; US9725195B2; US9932137B2; US11208225B2; US8453420B2; US10005580B2; US10053253B2; US10435191B2; US10926906B2; US10934034B2; US11034470B2; US11104464B2; US11111045B2; US11505343B2; US11518557B2; US11731793B2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1213223 A1 20020612**; IT 1319650 B1 20031023; IT MI20002446 A1 20020514

DOCDB simple family (application)  
**EP 01103118 A 20010209**; IT MI20002446 A 20001114