

Title (en)
Deep drawing packaging machine and method

Title (de)
Tiefziehverpackungsmaschine und Verfahren

Title (fr)
Machine d'emballage par emboutissage et procédé

Publication
EP 2960165 A1 20151230 (DE)

Application
EP 14173592 A 20140624

Priority
EP 14173592 A 20140624

Abstract (en)
[origin: ES1140983U] A thermoforming packaging machine (1), comprising a forming station (2) of a lower film that includes a number n of mold cavities (23), n being greater than or equal to 2, for the formation of n depressions (9) in a lower film (7) and an upper film forming station (3), including n evacuable domes (28), which are each enclosed by a clamping surface (29) and having a first height (d1) between the clamping surface (29) and a gap (35), to form n caps (14) in a top film (11), which is a coating film, wherein the upper film forming station (3) is disposed upstream of a sealing station (4) in a production direction (r), in which the sealing station (4) is configured for the sealing of the n caps (14) with the n depressions (9) associated with them, in which the sealing station (4)) includes an upper part of the sealing tool (16) comprising n warming and evacuating domes (18) having a second height (d2), said domes (18) being configured to allow the upper film (11)) is brought into contact with the respective dome (18) from the inside and to heat it to a coating temperature and said first height (d1) is at least 80% of the second height (d2). (Machine-translation by Google Translate, not legally binding)

Abstract (de)
Die Erfindung betrifft eine Tiefziehverpackungsmaschine (1) sowie ein Verfahren zum Herstellen einer Skinverpackung (19), bei dem eine Skinfolie (11) vor einer Siegelstation (4) vorgeformt und in der Siegelstation (4) weiterverformt wird, um sich an ein weit über eine Verpackungsmulde (9) überstehendes Produkt (50) anlegen zu können.

IPC 8 full level
B65B 47/10 (2006.01); **B65B 9/04** (2006.01); **B65B 31/02** (2006.01); **B65B 47/02** (2006.01)

CPC (source: EP US)
B65B 9/04 (2013.01 - EP US); **B65B 9/045** (2013.01 - EP US); **B65B 31/021** (2013.01 - EP US); **B65B 47/02** (2013.01 - EP US); **B65B 47/10** (2013.01 - EP US)

Citation (applicant)
• DE 10237933 A1 20040226 - MULTIVAC HAGGENMUELLER GMBH [DE]
• EP 2412643 A1 20120201 - MULTIVAC HAGGENMUELLER GMBH [DE]
• WO 2004000650 A1 20031231 - MULTIVAC HAGGENMUELLER GMBH [DE], et al
• EP 0270208 A1 19880608 - GRACE W R & CO [US]

Citation (search report)
• [ID] EP 2412643 A1 20120201 - MULTIVAC HAGGENMUELLER GMBH [DE]
• [ID] EP 0270208 A1 19880608 - GRACE W R & CO [US]
• [A] WO 0038992 A1 20000706 - CRYOVAC INC [US], et al
• [A] GB 1242726 A 19710811 - YOUNG WILLIAM EDMUND [US]
• [A] EP 0186729 A1 19860709 - MULTIVAC HAGGENMUELLER KG [DE]

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

DOCDB simple family (publication)
EP 2960165 A1 20151230; EP 2960165 B1 20170809; DE 202015002847 U1 20160722; DK 2960165 T3 20171113; ES 1140983 U 20150709; ES 1140983 Y 20150930; ES 2644994 T3 20171201; US 10384820 B2 20190820; US 2015367971 A1 20151224

DOCDB simple family (application)
EP 14173592 A 20140624; DE 202015002847 U 20150420; DK 14173592 T 20140624; ES 14173592 T 20140624; ES 201530735 U 20150622; US 201514746613 A 20150622