

Title (en)

Deep draw packaging machine and method for stretching a sheet of film

Title (de)

Tiefziehverpackungsmaschine und Verfahren zum Recken einer Folienbahn

Title (fr)

Machine d'emballage par emboutissage et procédé de tension d'une bande de feuille

Publication

**EP 2444324 B1 20130213 (DE)**

Application

**EP 11008381 A 20111018**

Priority

DE 102010048977 A 20101020

Abstract (en)

[origin: EP2444324A1] The thermoforming packaging machine (1) has a stretching station (12) for stretching a sheet (11) with a heating device, a printing mark sensor and a clamping device. The stretching station has a film cooling device with a cooling plate. The film cooling device lies on another side of the sheet than the heating device. An independent claim is also included for a method for stretching a sheet on a thermoforming machine.

IPC 8 full level

**B65B 9/04** (2006.01); **B65B 41/18** (2006.01)

CPC (source: EP US)

**B65B 9/04** (2013.01 - EP US); **B65B 41/18** (2013.01 - EP US)

Cited by

US11981470B2; WO2020207670A1

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

DOCDB simple family (publication)

**EP 2444324 A1 20120425**; **EP 2444324 B1 20130213**; CN 102530287 A 20120704; CN 102530287 B 20140709;  
DE 102010048977 A1 20120426; ES 2400608 T3 20130411; US 2012096809 A1 20120426; US 9180987 B2 20151110

DOCDB simple family (application)

**EP 11008381 A 20111018**; CN 201110322038 A 20111020; DE 102010048977 A 20101020; ES 11008381 T 20111018;  
US 201113277586 A 20111020