

Title (en)

Device for punching series of microperforations in film material

Title (de)

Vorrichtung zum Stanzen von Mikroperforationsreihen in Folienmaterial

Title (fr)

Dispositif pour poinçonner des séries de microperforations dans un matériau sous forme de film

Publication

EP 2179824 A1 20100428 (EN)

Application

EP 08167425 A 20081023

Priority

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Abstract (en)

The invention relates to a device for punching series of perforations in a length of film material (3), like a polymer foil, comprising a planar support surface (4) for supporting said film material, a needle frame (6) mounted reciprocatingly movable above said support surface, said needle frame holding a series of needles (7) with their needle tips towards said support surface and which are mounted in said needle frame to be substantially freely movable in their longitudinal direction, said device further comprising an actuator (8) for reciprocate said needle frame towards said support surface for bringing the tips of said needles in contact with said support surface. The invention further relates to a method for punching series of perforations in a length of polymer film, wherein a part of said polymer film is advanced over a support surface and is rested on said transport surface, a frame provided with a series of needles which are free moveable in their longitudinal direction is moved downward with the tips of the needles piercing the part of polymer film until they rest on said support surface, said frame is moved upward away from said polymer film until said needles are free from said polymer film, and said punctured part of polymer film is advanced further until a new part of un-punctured polymer film rests on said support surface.

IPC 8 full level

B26F 1/02 (2006.01); **B26F 1/24** (2006.01)

CPC (source: EP)

B26F 1/02 (2013.01); **B26F 1/24** (2013.01)

Citation (applicant)

- EP 1714885 A1 20061025 - MULTIVAC HAGGENMUELLER GMBH [DE]
- US 5720915 A 19980224 - JOPPEN HENK [NL], et al

Citation (search report)

- [A] EP 1839825 A1 20071003 - GROZ BECKERT KG [DE]
- [X] EP 1757375 A1 20070228 - ORIENT INSTR COMP CO LTD [JP]
- [DA] EP 0718077 A1 19960626 - HOECHST AG [DE]

Cited by

EP3808552A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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