

Title (en)

A KNIFE, A FILLING MACHINE AND A METHOD FOR FILLING AND SEALING A PACKAGE

Title (de)

MESSER, FÜLLMASCHINE UND VERFAHREN ZUM FÜLLEN UND VERSCHLIESSEN EINER VERPACKUNG

Title (fr)

COUTEAU, MACHINE DE REMPLISSAGE ET PROCÉDÉ DE REMPLISSAGE ET DE SCELLAGE D'UN EMBALLAGE

Publication

**EP 4302946 A1 20240110 (EN)**

Application

**EP 23178706 A 20230612**

Priority

EP 22182761 A 20220704

Abstract (en)

A knife (100) for cutting through a tube-shaped body of packaging material such that individual packages are formed. The knife (100) comprises an attachment portion (111, 112) for connecting the knife (100) to a cutting unit, such that the knife (100) is movable in a cutting direction (C), from a retracted position, to a cutting position and back to the retracted position. The knife (100) has a cutting edge (102) that extends in a direction (T) transverse to the cutting direction (C), and has a protrusion (131) which extends, as seen in the cutting direction (C), beyond the cutting edge (102) and includes an interaction surface (133) configured to interact with a sensor unit if the knife (100) is not moved to the retraced position (P1) after cutting through the tube-shaped body.

IPC 8 full level

**B26D 1/08** (2006.01); **B26D 1/00** (2006.01); **B65B 9/20** (2012.01); **B65B 61/06** (2006.01)

CPC (source: CN EP)

**B26D 1/0006** (2013.01 - EP); **B26D 1/085** (2013.01 - EP); **B65B 9/10** (2013.01 - CN); **B65B 9/207** (2013.01 - EP); **B65B 51/10** (2013.01 - CN); **B65B 57/00** (2013.01 - CN); **B65B 61/06** (2013.01 - CN EP); **B26D 2001/006** (2013.01 - EP)

Citation (applicant)

WO 2015028198 A1 20150305 - TETRA LAVAL HOLDINGS & FINANCE [CH]

Citation (search report)

- [XAI] US 2016207654 A1 20160721 - TEGMAN NIKLAS [SE], et al
- [XAI] EP 2546033 A1 20130116 - NEC INFRONTIA CORP [JP]
- [XAI] DE 202006010516 U1 20060831 - STABA TECHNIC WILHELM BOEGLE K [DE]
- [A] US 2015343807 A1 20151203 - MASUDA KEN [JP]
- [A] WO 2012147304 A1 20121101 - STAR MFG CO [JP], et al
- [A] US 2015258819 A1 20150917 - CHIBA MASAFUMI [JP]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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