

Title (en)  
WRAPPING UNIT

Title (de)  
VERPACKUNGSEINHEIT

Title (fr)  
UNITÉ D'EMBALLAGE

Publication  
**EP 3176098 B2 20221116 (EN)**

Application  
**EP 16201962 A 20161202**

Priority  
IT UB20156283 A 20151203

Abstract (en)  
[origin: EP3176098A1] A wrapping unit (1), comprising at least one gripper (2) provided with mutually opposite jaws (3) for clamping at least one end of a tubular blank (A) that contains a product (B) to be packaged; at least one of the jaws (3) comprises at least one air extraction unit (4) for extracting the air from the inside of the tubular blank (A) simultaneously with its clamping.

IPC 8 full level  
**B65B 25/00** (2006.01); **B65B 11/08** (2006.01)

CPC (source: EP)  
**B65B 11/08** (2013.01); **B65B 25/005** (2013.01)

Citation (opposition)  
Opponent :

- WO 0222445 A1 20020321 - MARS BV [NL], et al
- WO 0206123 A1 20020124 - MARS INC [US]
- EP 1860032 A1 20071128 - CFS WEERT BV [NL]
- EP 2228306 A1 20100915 - CFS WEERT BV [NL]
- EP 1908573 A1 20080409 - CFS WEERT BV [NL]
- WO 2008040480 A2 20080410 - CFS WEERT BV [NL], et al
- DE 19933033 A1 20000817 - WOLFCRAFT GMBH [DE]
- US 2004172924 A1 20040909 - SUGA TADORU [JP]
- US 6889487 B2 20050510 - SUGA TADORU [JP]
- US 2016297554 A1 20161013 - HASHIMOTO SATOSHI [JP], et al
- CH 352614 B1
- DE 102005057265 A1 20070606 - BOSCH GMBH ROBERT [DE]

Cited by  
CN112429350A

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 3176098 A1 20170607; EP 3176098 B1 20190102; EP 3176098 B2 20221116; IT UB20156283 A1 20170603; TR 201904405 T4 20190521**

DOCDB simple family (application)  
**EP 16201962 A 20161202; IT UB20156283 A 20151203; TR 201904405 T 20161202**