

Title (en)

Pallet shaft with plastic coating

Title (de)

Palettenwelle mit Kunststoffumspritzung

Title (fr)

Arbre de palette avec enrobage en matière synthétique

Publication

EP 2698319 A1 20140219 (DE)

Application

EP 13175021 A 20130704

Priority

DE 102012214581 A 20120816

Abstract (en)

The pallet shaft (100) comprises a hollow central rod (101,201) that is surrounded by a plastic injection mold (102,202) containing a fiber reinforced plastic. A metal disc is fixed to one end of the central rod and incorporated with the plastic injection mold having fiber reinforced plastic. A spur gear tooth and/or a metal plate are partially or completely made of ferromagnetic material. The spur gear tooth is formed in a uniform pitch. The central rod is made of steel, aluminum or carbon. A non-circular geometry is provided in the cross section in a deletion region. An independent claim is included for a labeling machine.

Abstract (de)

Palettenwelle (100) für eine Etikettiermaschine, umfassend eine Zentralstange (101), die von einer Kunststoffumspritzung (102) umgeben ist und eine Etikettiermaschine zum Versehen von Behältern, wie Flaschen mit Etiketten, mit einer oder mehreren Etikettenpaletten, die eine oder mehrere erfindungsgemäße Palettenwellen umfasst.

IPC 8 full level

B65C 9/22 (2006.01); **B65C 9/00** (2006.01); **B65C 9/14** (2006.01); **B65C 9/16** (2006.01)

CPC (source: EP)

B65C 9/16 (2013.01)

Citation (applicant)

- EP 1820734 A1 20070822 - KRONES AG [DE]
- DE 202005007470 U1 20050707 - KRONES AG [DE]

Citation (search report)

- [XY] WO 9858793 A1 19981230 - PLASTO AS [NO], et al
- [Y] DE 4419578 A1 19951207 - ETI TEC MASCHINENBAU [DE]
- [AD] EP 1820734 A1 20070822 - KRONES AG [DE]
- [A] WO 9308083 A1 19930429 - TRYGG LARS ERIK [SE]
- [A] WO 0117858 A1 20010315 - B & H MFG CO INC [US]
- [X] "Overmolding (Rubber Bonded to Metal)", 2007, XP002717488, Retrieved from the Internet <URL:http://irpi.thomasnet.com/item/all-categories/overmolding-rubber-bonded-to-metal-/item-1003> [retrieved on 20131202]

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 2698319 A1 20140219; EP 2698319 B1 20160420; CN 103587764 A 20140219; CN 103587764 B 20170412;
DE 102012214581 A1 20140220

DOCDB simple family (application)

EP 13175021 A 20130704; CN 201310355800 A 20130815; DE 102012214581 A 20120816