

Title (en)  
Gear for an hydraulic gear machine

Title (de)  
Zahnrad für eine hydraulische Zahnradpumpe

Title (fr)  
Rue dentée pour une pompe à engrenages hydraulique

Publication  
**EP 2317144 A3 20121226 (EN)**

Application  
**EP 10189404 A 20101029**

Priority  
IT BO20090714 A 20091030

Abstract (en)  
[origin: EP2317144A2] A hydraulic gear apparatus comprises a pair of gears which mesh with each other with semi-encapsulation. Each gear has a plurality of teeth having a profile which falls within a tolerance band of  $\pm 1/15$ , more preferably  $\pm 1/20$ , and even more preferably  $\pm 1/30$  with respect to the height of the tooth, with respect to a profile homothetic to a profile defined by a predetermined spline function passing through a plurality of node points having predetermined coordinates {X,Y} with their origin on the axis of rotation.

IPC 8 full level  
**F04C 2/14** (2006.01)

CPC (source: EP US)  
**F04C 2/084** (2013.01 - EP US); **F04C 2/14** (2013.01 - EP US)

Citation (search report)  
No Search

Cited by  
CN106015516A

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 2317144 A2 20110504; EP 2317144 A3 20121226**; BR PI1003887 A2 20120612; CN 102052447 A 20110511; CN 102052447 B 20170412;  
IT 1398817 B1 20130321; IT BO20090714 A1 20110430; TW 201124653 A 20110716; US 2011103993 A1 20110505

DOCDB simple family (application)  
**EP 10189404 A 20101029**; BR PI1003887 A 20101029; CN 201010526348 A 20101101; IT BO20090714 A 20091030;  
TW 99137193 A 20101029; US 91478010 A 20101028