

Title (en)

BALANCING SHAFT FOR AN INTERNAL COMBUSTION ENGINE AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

AUSGLEICHSWELLE FÜR EINE BRENNKRAFTMASCHINE UND EIN VERFAHREN ZUR HERSTELLUNG DERSELBEN

Title (fr)

ARBRE D'EQUILIBRAGE POUR UN MOTEUR A COMBUSTION INTERNE ET PROCEDE DE PRODUCTION DUDIT ARBRE

Publication

**EP 1623140 A1 20060208 (DE)**

Application

**EP 04730235 A 20040429**

Priority

- EP 2004004541 W 20040429
- DE 10320747 A 20030509

Abstract (en)

[origin: WO2004099648A1] The invention relates to a balancing shaft (1) for an internal combusting engine and to a method for producing said balancing shaft which consists of a tubular hollow body (2) and comprises a counterweight (5) and functional elements arranged on said hollow body. The aim of said invention is to produce a small-sized balancing shaft in a simplest possible manner, a necessary counterweight being arranged, if necessary, on an appropriate area. For this purpose, said counterweight is arranged on the external periphery (4) of the hollow body and fixed to said area.

IPC 1-7

**F16F 15/26**; B21D 53/84

IPC 8 full level

**F16F 15/26** (2006.01)

CPC (source: EP US)

**F16D 1/072** (2013.01 - EP US); **F16D 1/0858** (2013.01 - EP US); **F16F 15/268** (2013.01 - EP US); **F16C 35/00** (2013.01 - EP); **F16F 2226/04** (2013.01 - EP US); **Y10T 29/49231** (2015.01 - EP US)

Citation (search report)

See references of WO 2004099648A1

Citation (examination)

US 5259268 A 19931109 - EBBINGHAUS ALFRED [DE], et al

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

**WO 2004099648 A1 20041118**; DE 10320747 A1 20041209; DE 10320747 B4 20070201; EP 1623140 A1 20060208; US 2007251489 A1 20071101; US 7533646 B2 20090519

DOCDB simple family (application)

**EP 2004004541 W 20040429**; DE 10320747 A 20030509; EP 04730235 A 20040429; US 55612104 A 20040429