

Title (en)

Composite camshaft and method and apparatus for manufacturing the same

Title (de)

Gebaute Nockenwelle mit Eindellungen sowie Verfahren und Vorrichtung zur Herstellung derselben

Title (fr)

Arbre à cames assemblé et procédé et dispositif de fabrication d'un tel arbre à cames

Publication

EP 1440745 B1 20081210 (DE)

Application

EP 04001505 A 20040123

Priority

DE 10302957 A 20030124

Abstract (en)

[origin: EP1440745A1] The built-up camshaft (11) consists of a tubular shaft (12) and several cams (14), each with a through aperture (15), pushed onto the shaft and fixed to it at a spacing from each other. The tubular shaft has heat-deformed sunken side joints (22) between the cams. These joints may have projections which exceed the external diameter of the shaft to enlarge the cross section of the through apertures

IPC 8 full level

B21D 53/84 (2006.01); **F01L 1/04** (2006.01); **F01L 1/047** (2006.01)

CPC (source: EP US)

B21D 53/845 (2013.01 - EP US); **F01L 1/047** (2013.01 - EP US); **F01L 2303/00** (2020.05 - EP US); **Y10T 74/2173** (2015.01 - EP US)

Cited by

DE102013210403A1; CN103442822A; WO2017220418A1; WO2007012408A1; WO2012066099A1

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DOCDB simple family (publication)

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DOCDB simple family (application)

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