

Title (en)
Gear pump

Title (de)
Zahnradmaschine

Title (fr)
Pompe à engrenages

Publication
EP 1340913 A2 20030903 (DE)

Application
EP 03003179 A 20030219

Priority
DE 10208408 A 20020227

Abstract (en)
The gear teeth of the annular gear machine are formed from gear points (4k,3k) and gear roots (4f,3f) formed from curves of the second or higher order, whereby the curves on their ends point tangentially to one another, and at least the curves which form the tooth points, or at least the curves which form the tooth roots, are cycloids. One of the tooth profile contours formed by the curves is gradually differentiable, and preferably twice differentiable by piece. An Independent claim is included for a gear set for an annular gear machine such as a pump or motor.

Abstract (de)
Zahnradverzahnung aus Zahnköpfen und Zahnfüßen, die von Kurven zweiter oder höherer Ordnung gebildet werden, wobei die Kurven an ihren Enden tangential aufeinander zu weisen und wenigstens die Kurven, die die Zahnköpfe (3k) bilden, oder wenigstens die Kurven, die die Zahnfüße (3f) bilden, keine Zykloiden sind. <IMAGE>

IPC 1-7
F04C 2/10; **F04C 2/08**

IPC 8 full level
F04C 2/10 (2006.01); **F04C 2/08** (2006.01); **F16H 55/08** (2006.01)

CPC (source: EP US)
F04C 2/084 (2013.01 - EP US); **F04C 2/088** (2013.01 - EP US); **F04C 2/102** (2013.01 - EP US)

Cited by
WO2012113768A1; CN103443459A; CN104662331A; EP2123914A4; US9273687B2

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