

## Europäisches Patentamt European Patent Office Office européen des brevets



(11) EP 1 655 490 A8

(12)

## **CORRECTED EUROPEAN PATENT APPLICATION**

published in accordance with Art. 158(3) EPC Note: Bibliography reflects the latest situation

(15) Correction information:

Corrected version no 1 (W1 A1)
INID code(s) 71

(48) Corrigendum issued on: **04.10.2006 Bulletin 2006/40** 

(43) Date of publication: 10.05.2006 Bulletin 2006/19

(21) Application number: 04771466.2

(22) Date of filing: 10.08.2004

(51) Int Cl.: **F04C 2/10** (2006.01)

(86) International application number: PCT/JP2004/011479

(87) International publication number: WO 2005/015022 (17.02.2005 Gazette 2005/07)

(84) Designated Contracting States: **DE ES FR GB IT** 

(30) Priority: 12.08.2003 JP 2003207347

(71) Applicant: Mitsubishi Materials PMG Corporation Niigata-shi, Niigata 9508064 (JP) (72) Inventor: HOSONO, Katsuaki Niigata-shi, Niigata 9508640 (JP)

(74) Representative: HOFFMANN EITLE Patent- und Rechtsanwälte Arabellastrasse 4 81925 München (DE)

## (54) **OIL PUMP ROTOR**

(57) There is disclosed a rotor pump assembly which reduces noise emitted from an oil pump while preventing pumping performance and mechanical efficiency thereof from being decreased by properly forming the profiles of teeth of an inner rotor and an outer rotor which are engageable with each other. The tooth profile of an inner rotor 110 and/or an outer rotor 120 has curved lines obtained by dividing a cycloid curve into two segments to be separated from each other, and in which the separated segments are smoothly connected to each other using a straight line or a curve.



(a)



