

Title (en)
ROTARY ENGINE WITH CYLINDERS OF DIFFERENT DESIGN AND VOLUME

Title (de)
UMLAUFMOTOR MIT ZYLINDERN VON UNTERSCHIEDLICHEM DESIGN UND UNTERSCHIEDLICHER GRÖSSE

Title (fr)
MOTEUR ROTATIF AVEC CYLINDRES DE CONCEPTION ET VOLUME DIFFÉRENTS

Publication
EP 2100017 A4 20120905 (EN)

Application
EP 07869427 A 20071218

Priority
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• US 87564606 P 20061219

Abstract (en)
[origin: WO2008077032A1] A rotary internal combustion engine including a housing structure defining a toroidal volume and including first and second housing sections, a rotor structure mounted for rotation in the housing structure and including first and second rotor members respectively that coact with first and second housing sections to define first and second toroidal cylinders. The intake and compression strokes are performed in the first toroidal cylinder and the resultant compressed charge being thereafter transferred by a transfer mechanism through a transfer passage to the second toroidal cylinder where combustion occurs and expansion and exhaust strokes are performed. In the device at least one of the following is true: the transfer mechanism is operative to maintain the volume of the charge substantially constant during the transfer operation; the first and second cylinders have disparate configurations; the second toroidal cylinder has a larger volume than the first toroidal cylinder with the transfer mechanism maintaining the volume of the charge substantially constant during the transfer operation irrespective of the larger volume of the second toroidal cylinder as compared to the first toroidal cylinder.

IPC 8 full level
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CPC (source: EP US)
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Y02T 10/12 (2013.01 - EP US)

Citation (search report)
• [X] WO 2006072820 A2 20060713 - CERRUTI ALDO [IT], et al
• [XP] WO 2007015114 A1 20070208 - SAVVAKIS SAVVAS [GR]
• [A] CA 1304692 C 19920707 - VUJIC MILOS [CA]
• [A] GB 1296769 A 19721115
• [A] GB 342264 A 19310121 - JOSEF SCHELLERER, et al
• See references of WO 2008077032A1

Designated contracting state (EPC)
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US 2009308342 A1 20091217

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US 51979607 A 20071218