

Title (en)  
V-ENGINE FOR VEHICLE

Title (de)  
V-MOTOR FÜR FAHRZEUG

Title (fr)  
MOTEUR EN V POUR VEHICULE

Publication  
**EP 1489284 A4 20060503 (EN)**

Application  
**EP 03710267 A 20030306**

Priority  
• JP 0302685 W 20030306  
• JP 2002060058 A 20020306

Abstract (en)  
[origin: EP1489284A1] Auxiliary devices are mounted on sides of one end in an axial direction of a crankshaft, a transmission means for transmitting power of the crankshaft to the auxiliary devices and a transmission means for transmitting the power of the crankshaft to camshafts in a cylinder head are disposed in the one end, and the one end is mounted on a vehicle body so as to be positioned on the center side of the vehicle body.  
<IMAGE>

IPC 8 full level  
**F02B 75/22** (2006.01); **B60K 17/00** (2006.01); **F01L 1/02** (2006.01); **F01L 1/34** (2006.01); **F01L 1/344** (2006.01); **F01L 1/46** (2006.01); **F02B 67/04** (2006.01); **F02B 67/06** (2006.01)

CPC (source: EP)  
**F01L 1/02** (2013.01); **F01L 1/022** (2013.01); **F01L 1/344** (2013.01); **F01L 1/46** (2013.01); **F02B 67/06** (2013.01); **F02B 75/22** (2013.01)

Citation (search report)  
• [XY] DE 3907039 A1 19900517 - KOROSTENSKI ERWIN DIPL ING [DE]  
• [X] US 5400748 A 19950328 - BATZILL MANFRED [DE], et al  
• [Y] GB 1021561 A 19660302 - ANTHONY COLIN BRUCE CHAPMAN  
• [Y] DE 4029058 A1 19920319 - PORSCHE AG [DE]  
• [E] WO 03074853 A1 20030912 - YAMAHA MOTOR CO LTD [JP], et al  
• [X] PATENT ABSTRACTS OF JAPAN vol. 004, no. 167 (M - 042) 19 November 1980 (1980-11-19)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 015, no. 013 (M - 1069) 11 January 1991 (1991-01-11)  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 018, no. 563 (M - 1693) 27 October 1994 (1994-10-27)  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 005, no. 087 (M - 072) 6 June 1981 (1981-06-06)  
• See references of WO 03074852A1

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