

Title (en)  
Low noise cooling system.

Title (de)  
Geräuscharme Kühlanlage.

Title (fr)  
Système de refroidissement à faible bruit.

Publication  
**EP 0645543 A1 19950329 (EN)**

Application  
**EP 94112831 A 19940817**

Priority  
US 11443393 A 19930831

Abstract (en)  
A cooling system (20) for use with an internal combustion engine (24) is disclosed, the cooling system (20) including a fan (26) defining a central axis, a radiator (30) asymmetrical in shape about the central axis, and a fan shroud (34) disposed about the fan (26) and defining a flow path for directing cooling flow across the radiator (30). The fan shroud (34) includes a radially converging inlet portion (40), a radially diverging outlet portion (44) and a cylindrical transition portion (42) therebetween. The radially converging inlet portion (40) and the radially diverging outlet portion (44) are axisymmetrical in shape about the central axis and are substantially symmetric with one another about an imaginary plane (49) constructed normal to the central axis. The geometry of the fan shroud (34), the alignment of the fan shroud (34) relative to the fan (26), and the fan spacing relative to the radiator (30) are determined according to dimensionless numbers relating the various geometries to the fan diameter and the projected axial fan chord. <IMAGE>

IPC 1-7  
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IPC 8 full level  
**F01P 5/06** (2006.01); **F01P 11/10** (2006.01); **F01P 11/12** (2006.01); **F04D 29/54** (2006.01)

CPC (source: EP)  
**F01P 5/06** (2013.01); **F04D 29/545** (2013.01)

Citation (search report)

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