

Title (en)
Heat exchanger

Title (de)
Wärmetauscher

Title (fr)
Echangeur de chaleur

Publication
EP 0930480 A2 19990721 (EN)

Application
EP 98310306 A 19981216

Priority
JP 36675397 A 19971226

Abstract (en)
A heat exchanger is preferable to be applied to intercoolers, radiators and cooling means in semiconductor circuits and improved in heat exchanging efficiency by provision of gas paths that are formed with porous metal bodies large in heat-transfer surface. The heat exchanger includes porous metal bodies(1,21) having intercommunicating porosity to provide gas-flow paths(4,24) for suction air(1A) and to make the heat-transfer surface larger, porous metal bodies(1,21) being made of metal such as aluminum or aluminum alloy high in thermal conductivity. The porous metal bodies(1,21) are pierced with tubular elements(2) in which cooling water flows through. The porous metal bodies(1,21) may be fabricated by preparing a mold of foamed urethane resin filled with salt cores, pouring a metal having a melting temperature lower than that of the salt cores in to the mold. <IMAGE>

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F28F 13/00; F28D 7/10

IPC 8 full level
F02B 77/00 (2006.01); **B22D 25/02** (2006.01); **C22C 1/08** (2006.01); **F01P 3/18** (2006.01); **F02B 29/04** (2006.01); **F28D 7/10** (2006.01); **F28F 1/10** (2006.01); **F28F 13/00** (2006.01); **F28F 21/08** (2006.01); **H01L 23/467** (2006.01)

CPC (source: EP)
F28D 7/106 (2013.01); **F28F 13/003** (2013.01); **H01L 2924/0002** (2013.01)

Citation (applicant)
JP 2017947298 A

Cited by
CN114025142A; EP4160078A1; CN107223197A; CN114658533A; CN109944678A

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