

Title (en)
Gas compressor with oil separator element

Title (de)
Gaskompressor mit Ölabscheiderelement

Title (fr)
Comresseur à gaz avec élément séparateur d'huile

Publication
EP 1277963 A1 20030122 (EN)

Application
EP 01306088 A 20010716

Priority
EP 01306088 A 20010716

Abstract (en)

To provide a gas compressor that is suitable for reducing cost for the overall compressor without degrading the oil separation performance needed for the compressor and that may keep the oil separation performance constant for a long period of time. An oil separator (20) having a pipe structure composed only of a discharge pipe (30) formed integrally with a side block (3) as a means for separating a lubricant oil component contained in high pressure cooling medium gas is adapted. In this case, the discharge pipe is adapted to form a discharge route for the high pressure cooling medium gas without any bypass immediately before an inner wall (16) of a compressor case (2) from a first discharge chamber (18). The separation of the lubricant oil component is performed by collision of the high pressure cooling medium gas, immediately after being discharged from a cylinder discharge port to the first discharge chamber, against the inner wall of the compressor case through the discharge pipe without reducing a high flow rate. <IMAGE>

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F04C 29/02; F04B 27/10; F04B 39/16

IPC 8 full level
F04B 39/16 (2006.01); **F04C 29/02** (2006.01)

CPC (source: EP)
F04B 39/16 (2013.01); **F04C 29/026** (2013.01)

Citation (search report)

- [XY] US 3776668 A 19731204 - ABENDSCHEIN F
- [Y] US 5133647 A 19920728 - HERRON ROSS W [US], et al
- [Y] GB 2012874 A 19790801 - SEIKO INSTR & ELECTRONICS
- [XY] EP 0600313 A1 19940608 - CALSONIC CORP [JP], et al
- [A] US 4255099 A 19810310 - KOMORI HARUYUKI
- [XA] PATENT ABSTRACTS OF JAPAN vol. 009, no. 306 (C - 317) 3 December 1985 (1985-12-03)

Cited by
JP2015183611A; DE112008002164B4; DE102004018732A1; WO2009046810A1; JP2015034518A

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