

Title (en)

Refrigerant compressor capacity control apparatus.

Title (de)

Vorrichtung zur Leistungsregelung eines K hlkompressors.

Title (fr)

Dispositif de r gulation de capacit  d'un compresseur de r frig ration.

Publication

EP 0009145 A1 19800402 (EN)

Application

EP 79103180 A 19790828

Priority

US 94423778 A 19780920

Abstract (en)

A capacity control for a multi-cylinder refrigeration compressor (20) includes a modulating valve (40) disposed between a suction manifold (34) and less than all of the cylinders (30) of the refrigeration compressor (20). The modulating valve (40) regulates the flow of refrigerant gas from the manifold (34) to the cylinders (30) in communication therewith, with the valve (40) functioning to increase the flow of refrigerant gas to the cylinders (30) as the load on the refrigeration unit (10) increases and to decrease the flow of refrigerant as the load on the refrigeration unit (10) decreases.

IPC 1-7

F25B 49/00; F04B 49/00

IPC 8 full level

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CPC (source: EP US)

F04B 49/225 (2013.01 - EP); **F25B 49/022** (2013.01 - EP US); **F25B 41/22** (2021.01 - EP US); **F25B 2400/074** (2013.01 - EP)

Citation (search report)

- US 3360952 A 19680102 - LEWIS CARL M
- US 2309773 A 19430202 - KAUFMAN DANIEL L
- US 3872685 A 19750325 - MATTHIS ALAN A
- US 3518032 A 19700630 - DEGROFF RICHARD C, et al
- US 3759057 A 19730918 - ENGLISH W, et al
- FR 1284287 A 19620209 - BORG WARNER
- GB 1089694 A 19671101 - J & E HALL LTD
- US 3781135 A 19731225 - NICKELL C
- DE 146420 C
- FR 1259473 A 19610428 - CHANTIERES DE LATLANTIQUE
- US 3578883 A 19710518 - CHENEY LAWRENCE W

Cited by

KR100898023B1; US4452570A; US4452571A; EP0297514A1; US4382749A; EP1876354A3; EP1279833A3

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