

Title (en)
Compressor System

Title (de)
Kompressorsystem

Title (fr)
Système de compresseur

Publication
EP 1607631 A3 20060322 (EN)

Application
EP 05103404 A 20050426

Priority
• KR 20040040994 A 20040604
• KR 20040073172 A 20040913

Abstract (en)
[origin: EP1607631A2] A driving unit and control method for a reciprocating compressor for controlling a frequency of input power so that an operational frequency of the compressor follows a resonant frequency, which varies depending on a variation of the load applied to the compressor. The reciprocating compressor includes an inverter to adjust the frequency of the input power, so that the frequency of the input power is set at a value corresponding to the resonant frequency by the inverter. The resonant frequency is set in a range of 60% to 90% of the normal power frequency. The compressor further includes a controller to control the frequency of the input power so that the operational frequency of the compressor follows the resonant frequency, which varies depending on the operation of the compressor.

IPC 8 full level
F04B 17/00 (2006.01); **F04B 35/04** (2006.01); **F04B 49/06** (2006.01)

CPC (source: EP US)
F04B 35/045 (2013.01 - EP US); **F04B 2201/0806** (2013.01 - EP US); **F04B 2203/0401** (2013.01 - EP US); **F04B 2203/0402** (2013.01 - EP US);
F04B 2203/0404 (2013.01 - EP US)

Citation (search report)
• [XY] US 4706470 A 19871117 - AKAZAWA NAOKI [JP], et al
• [Y] US 5947693 A 19990907 - YANG SOON-BAE [KR]
• [A] US 6074172 A 20000613 - HUANG BIN-JUINE [TW]
• [A] US 5106268 A 19920421 - KAWAMURA AKIRA [JP], et al
• [A] GB 2109590 A 19830602 - STANDARD TELEPHONES CABLES LTD
• [A] US 4514991 A 19850507 - ZINSMEYER THOMAS M [US]
• [A] US 4474537 A 19841002 - DOELZ HEINRICH [DE]

Cited by
WO2012122615A3; US10697444B2; US11187221B2

Designated contracting state (EPC)
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