

Title (en)

COMPRESSOR SYSTEM AND METHOD FOR OPERATING A COMPRESSOR SYSTEM ACCORDING TO THE COMPRESSED-AIR DEMAND OF AN OPERATING STATE OF THE VEHICLE

Title (de)

KOMPRESSORSYSTEM UND VERFAHREN ZUM BETREIBEN EINES KOMPRESSORSYSTEMS IN ABHÄNGIGKEIT DES DRUCKLUFTBEDARFS EINES BETRIEBSZUSTANDS DES FAHRZEUGS

Title (fr)

SYSTÈME DE COMPRESSEUR ET PROCÉDÉ DE FONCTIONNEMENT D'UN SYSTÈME DE COMPRESSEUR EN FONCTION DE LA DEMANDE D'AIR COMPRIMÉ D'UN ÉTAT DE FONCTIONNEMENT DU VÉHICULE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2021140049A1] The invention relates to a compressor system and to a method for operating a compressor system according to the compressed-air demand in an operating state of the vehicle. A compressor system according to the invention comprises a compressor (3) for producing compressed air for at least one compressed-air vessel (4), the delivery rate of the compressor (3) being able to be adjusted at least indirectly by means of a control device (5). The control device (5) is configured to be able to increase the delivery rate of the compressor (3) beyond a defined operating maximum rate when there is exceptional demand.

IPC 8 full level

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Citation (opposition)

Opponent : FAIVELEY TRANSPORT ITALIA S.P.A.

- DE 102013113555 A1 20150611 - KNORR BREMSE SYSTEME FÜR SCHIENENFAHRZEUGE GMBH [DE]
- DE 102013113557 A1 20150611 - KNORR BREMSE SYSTEME FÜR SCHIENENFAHRZEUGE GMBH [DE]
- DE 102013113556 A1 20150611 - KNORR BREMSE SYSTEME FÜR SCHIENENFAHRZEUGE GMBH [DE]
- DE 102012223996 A1 20140626 - SIEMENS AG [DE]
- US 4756669 A 19880712 - HATA YASUHISA [JP]
- US 2004265134 A1 20041230 - IIMURA YOSHIO [JP], et al
- US 6461112 B1 20021008 - OHTA HIROSHI [JP], et al
- JAGDEV SINGH, NIRMAL SINGH AND J K SHARMA: "Fuzzy modeling and identification of intelligent control for refrigeration compressor", JOURNAL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, vol. 65, 31 January 2006 (2006-01-31), pages 22 - 30, XP055042605

Opponent : Siemens Mobility GmbH

- EP 2964955 B1 20190313 - WABCO GMBH [DE]
- DE 102013113555 A1 20150611 - KNORR BREMSE SYSTEME FÜR SCHIENENFAHRZEUGE GMBH [DE]
- DE 102017010772 A1 20190523 - WABCO GMBH [DE]
- DE 102012223996 A1 20140626 - SIEMENS AG [DE]
- DE 102013003512 A1 20140904 - WABCO GMBH [DE]
- DE 2727449 A1 19780302 - WABCO WESTINGHOUSE SPA
- US 2016341460 A1 20161124 - PHAM HUNG M [US], et al
- US 2704631 A 19550322

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DOCDB simple family (application)

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