

Title (en)

SIMULATION-SUPPORTED METHOD FOR CONTROLLING AND REGULATING COMPRESSED AIR STATIONS

Title (de)

SIMULATIONSGESTÜTZTES VERFAHREN ZUR STEUERUNG BZW. REGELUNG VON DRUCKLUFTSTATIONEN

Title (fr)

PROCÉDÉ ASSISTÉ PAR SIMULATION POUR LA COMMANDE OU LA RÉGULATION DE STATIONS D'AIR COMPRIMÉ

Publication

EP 2376783 B2 20201104 (DE)

Application

EP 09799353 A 20091223

Priority

- EP 2009067838 W 20091223
- DE 102008064491 A 20081223

Abstract (en)

[origin: CA2746110A1] Method for controlling and regulating a compressed air station (1) comprising at least a plurality of interconnected compressors (2), said method being able to implement circuit strategies in the compressed air station using an electronic system controller (3) that influences an amount of a pressurized fluid which is available at all times to one or more users of the compressed air station, the method also being able to adaptively adjust the amount of pressurized fluid which is available at all times to one or more users of the compressed air station according to future operating conditions of the compressed air station, said adaptive adjustment being relative to the amount of compressed fluid withdrawn from the compressed air station, wherein prior to the implementation of a circuit strategy, various circuit strategies are examined in a prior simulation process using a model of the compressed air station as a basis, and from the examined circuit strategies the most advantageous circuit strategy, relatively speaking, is selected according to at least one established quality criterion, and the selected circuit strategy is forwarded to the system controller for implementation in the compressed air station.

IPC 8 full level

F04C 28/02 (2006.01); **F04B 49/06** (2006.01); **G05B 17/02** (2006.01)

CPC (source: EP US)

F04B 49/06 (2013.01 - EP US); **F04B 49/065** (2013.01 - US); **F04C 28/02** (2013.01 - EP US); **F04C 2270/56** (2013.01 - EP US)

Cited by

EP3236328A1; WO2017182447A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

DE 102008064491 A1 20100624; AU 2009331498 A1 20110818; BR PI0918192 A2 20151201; BR PI0918192 B1 20220303;
CA 2746110 A1 20100701; CA 2746110 C 20161213; CN 102272456 A 20111207; CN 102272456 B 20140813; EP 2376783 A1 20111019;
EP 2376783 B1 20170215; EP 2376783 B2 20201104; ES 2622985 T3 20170710; ES 2622985 T5 20210722; JP 2012513563 A 20120614;
JP 5702301 B2 20150415; MX 2011006810 A 20110720; MX 342254 B 20160921; RU 2011130185 A 20130127; RU 2536639 C2 20141227;
US 2012029706 A1 20120202; WO 2010072803 A1 20100701

DOCDB simple family (application)

DE 102008064491 A 20081223; AU 2009331498 A 20091223; BR PI0918192 A 20091223; CA 2746110 A 20091223;
CN 200980152462 A 20091223; EP 09799353 A 20091223; EP 2009067838 W 20091223; ES 09799353 T 20091223;
JP 2011130185 A 20091223; RU 2011130185 A 20091223; US 200913141233 A 20091223