

Title (en)

Compressor monitoring system with sensor modules in wireless communication with a controller

Title (de)

Verdichter-Überwachungssystem mit Sensormodulen, die drahtlos mit einer Steuereinheit kommunizieren

Title (fr)

Système de surveillance d'un compresseur avec modules de capteurs qui communiquent sans fil avec une unité de contrôle

Publication

EP 2990659 A1 20160302 (EN)

Application

EP 14182670 A 20140828

Priority

EP 14182670 A 20140828

Abstract (en)

The invention relates to a measurement system (MS) for compressor (TC) performance monitoring and to a respective measurement method. To most efficiently evaluate the operational performance the invention proposes said measurement system (MS) comprising at least four boxed units (BU) wherein a first boxed unit (BU1) is connected to or comprises sensors (MFS) to directly or indirectly measure a mass flow (MF) or volume flow (VF) being compressed by the compressor (TC), wherein a second boxed unit (BU2) is connected to or comprises sensors (CS) to directly or indirectly measure a) a compressor inlet temperature (TCI), b) a compressor outlet temperature (TCO), c) a compressor inlet pressure (PCI), d) a compressor outlet pressure (PCO), wherein a third boxed unit (BU3) is connected to or comprises sensors (PS) to directly or indirectly measure a) current (CP) of the power supplied to a drive motor (DM) of said compressor (TC), b) voltage (VP) of the power supplied to the drive motor (DM), wherein a fourth boxed unit (BU4) is signal transmitting connected by a connection (C1 - C4) to said boxed units (BU1 - BU3) and comprises a storage (SDC) to store collected measurement data from said boxed units (BU1 - BU3) into said storage (SDC). Further a measurement method is proposed.

IPC 8 full level

F04D 27/00 (2006.01)

CPC (source: EP)

F04B 51/00 (2013.01); **F04D 27/001** (2013.01)

Citation (applicant)

US 7596959 B2 20091006 - SINGH ABTAR [US], et al

Citation (search report)

- [XYI] US 2008077260 A1 20080327 - PORTER MICHAEL RAMEY [US], et al
- [YA] US 2013272840 A1 20131017 - FUJIOKA TAMOTSU [JP], et al
- [A] US 2009019938 A1 20090122 - KLOSINSKI ANDREW JURI [US]

Cited by

WO2020135501A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2990659 A1 20160302

DOCDB simple family (application)

EP 14182670 A 20140828