

Title (en)

MULTISTAGE CENTRIFUGAL COMPRESSOR WITH AN ANTI-SURGE SYSTEM AND CONTROL METHOD THEREFOR

Title (de)

MEHRSTUFIGER ZENTRIFUGALVERDICHTER MIT PUMPSCHUTZSYSTEM UND STEUERUNGSVERFAHREN DAFÜR

Title (fr)

COMPRESSEUR CENTRIFUGE À PLUSIEURS ÉTAGES AVEC SYSTÈME ANTI-POMPAGE ET PROCÉDÉ DE COMMANDE ASSOCIÉ

Publication

EP 3904690 B1 20231220 (EN)

Application

EP 21168518 A 20210415

Priority

CN 202010346052 A 20200427

Abstract (en)

[origin: EP3904690A1] An anti-surge system for a centrifugal compressor, the centrifugal compressor including first to Nth compression stages (C1, C2, C3, C4), and an intermediate gas extraction pipeline (IA/PA) being disposed between an (M-1)th compression stage and an Mth compression stage, wherein N is an integer ≥ 2 , and M is an integer $\leq N$, comprises: a first throttle device (Fa); a first pressure sensor (Pa); a first temperature sensor (Ta); a second pressure sensor (Pb); a second throttle device (Fb); a second temperature sensor (Tb); a third pressure sensor (Pc); a branch pipeline (Bp); an anti-surge backflow valve (ASV); and a control system, comprising a first anti-surge controller (ASC1), a second anti-surge controller (ASC2) and a selector (HY).

IPC 8 full level

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CPC (source: CN EP)

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F05D 2270/3013 (2013.01 - CN); **F05D 2270/3015** (2013.01 - EP); **F05D 2270/303** (2013.01 - CN EP); **F05D 2270/3061** (2013.01 - CN EP)

Citation (examination)

US 2013045079 A1 20130221 - FLETCHER PAUL [GB], et al

Cited by

CN115949609A

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