

Title (en)  
HYBRID COMPRESSOR SYSTEM AND METHODS

Title (de)  
HYBRIDKOMPRESSORSYSTEM UND VERFAHREN DAFÜR

Title (fr)  
SYSTÈME DE COMPRESSEUR HYBRIDE ET PROCÉDÉS

Publication  
**EP 2715254 A2 20140409 (EN)**

Application  
**EP 12722646 A 20120515**

Priority  
• US 201161491515 P 20110531  
• US 2012037872 W 20120515

Abstract (en)  
[origin: WO2012166338A2] An apparatus (20) has a centrifugal compressor (24), a positive displacement compressor (26), a first heat exchanger (32), and a second heat exchanger (36). A plurality of valves (70, 72, 74) are positioned to provide operation in at least two modes. In a first mode, refrigerant is compressed in the positive displacement compressor and the centrifugal compressor at least partially in parallel. In a second mode, refrigerant is compressed in the positive displacement compressor and the centrifugal compressor is offline. In a third mode, refrigerant is compressed in the positive displacement compressor and the centrifugal compressor at least partially in series.

IPC 8 full level  
**F25B 41/04** (2006.01); **F25B 1/10** (2006.01); **F25B 31/00** (2006.01)

CPC (source: EP US)  
**F04D 29/582** (2013.01 - US); **F25B 1/10** (2013.01 - EP US); **F25B 31/00** (2013.01 - EP US); **F25B 41/20** (2021.01 - EP US);  
**F25B 41/24** (2021.01 - EP US)

Citation (search report)  
See references of WO 2012166338A2

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

DOCDB simple family (publication)  
**WO 2012166338 A2 20121206**; **WO 2012166338 A3 20130124**; CN 103748425 A 20140423; CN 103748425 B 20171017;  
EP 2715254 A2 20140409; US 2013177393 A1 20130711

DOCDB simple family (application)  
**US 2012037872 W 20120515**; CN 201280026803 A 20120515; EP 12722646 A 20120515; US 201213818210 A 20120515