

Title (en)
VAPOR COMPRESSION SYSTEM AND METHODS FOR ITS OPERATION

Title (de)
DAMPFKOMPRESSIONSSYSTEM UND BETRIEBSVERFAHREN DAFÜR

Title (fr)
SYSTÈME DE COMPRESSION DE VAPEUR ET PROCÉDÉS POUR SON OPÉRATION

Publication
EP 3099988 B1 20220427 (EN)

Application
EP 15703184 A 20150123

Priority
• US 201461933777 P 20140130
• US 2015012558 W 20150123

Abstract (en)
[origin: WO2015116480A1] An ejector has: a motive flow inlet (40); a secondary flow inlet (42); an outlet (44); a motive flow nozzle (242) having an outlet (110); a primary flowpath from the motive flow inlet through the motive flow nozzle to the ejector outlet; a secondary flowpath from the secondary flow inlet to the ejector outlet, merging with the primary flowpath at the motive nozzle outlet; a control needle (200; 300; 400) shiftable along a range of motion between a first condition and a second condition and seated against the motive nozzle in the second condition. The needle comprises: a main shaft (210); a tip (204); a first portion (220; 320) converging toward the tip; and a shoulder portion (214; 314; 422) between the first portion and the main shaft and seated against the motive nozzle in the second condition and converging toward the tip at a greater angle (?1; ?1 2) than an angle (?2; ?2 2) of the first portion.

IPC 8 full level
F25B 41/00 (2021.01)

CPC (source: EP US)
F25B 41/00 (2013.01 - EP US); **F25B 2341/0013** (2013.01 - EP US); **F25B 2400/23** (2013.01 - US)

Citation (examination)
• US 2008273992 A1 20081106 - KILLION DAVID L [US]
• US 2010209818 A1 20100819 - FUKUMA KAZUNORI [JP], et al

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 2015116480 A1 20150806; DK 3099988 T3 20220516; EP 3099988 A1 20161207; EP 3099988 B1 20220427; US 2017108256 A1 20170420

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US 2015012558 W 20150123; DK 15703184 T 20150123; EP 15703184 A 20150123; US 201515115753 A 20150123