

Title (en)
Compressor and apparatus for compressing two gases at high pressure

Title (de)
Kompressor und Vorrichtung zur Hochdruckverdichtung von zwei Gasen

Title (fr)
Compresseur et appareil pour comprimer deux gaz à haute pression

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Application
EP 07405344 A 20071206

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Abstract (en)
In a reciprocating piston compressor (1) comprising at least one first compression stage (11) for compressing a first gas, the first compression stage (11) comprises at least a first piston (13) sliding in a first compression (12) chamber. The compressor (1) further comprises at least one second compression stage (21) for compressing a second gas, the second compression stage (21) comprising at least a second piston (23) sliding in a second compression chamber (22), and the second and the first piston (13, 23) being mechanically linked and driven by the same mechanical actuator (31). The first and second gas are, within the compressor (1), kept separate from one another. This makes it possible to compress two gases, separate from each other in the same compressor (1). In a preferred embodiment of the invention, the volume ratio of the first and second compression stage (11, 21) is the same as the stoichiometric ratio of the gases produced by a separation process coupled to the compressor (1)

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Citation (applicant)
• US 4368008 A 19830111 - BUDZICH TADEUSZ [US]
• US 5238372 A 19930824 - MORRIS BRIAN G [US]
• WO 2005019721 A2 20050303 - PINNACLE WEST CAPITAL CORP [US], et al

Citation (search report)
• [XY] US 5238372 A 19930824 - MORRIS BRIAN G [US]
• [Y] US 3276673 A 19661004 - ROGER JONES JOHN, et al
• [X] US 4368008 A 19830111 - BUDZICH TADEUSZ [US]
• [A] US 4029440 A 19770614 - OLSEN JOHN H

Cited by
ITTO20120395A1; CN101922430A; CN107848144A; CN107980081A; AU2016291288B2; WO2013164867A1; WO2023217683A3; WO2017004634A1; US10661478B2; US10960575B2

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