

Title (en)
COMPRESSOR DEVICE AND COMPRESSION METHOD

Title (de)
KOMPRESSORVORRICHTUNG UND KOMPRESSIONSVERFAHREN

Title (fr)
SYSTÈME DE COMPRESSEUR ET PROCÉDÉ DE COMPRESSION

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Application
EP 19723320 A 20190418

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Abstract (en)
[origin: WO2019202115A1] The invention relates to a compressor device (100) for compressing a gas in at least one compression chamber (1a, 1b, 1c, 1d, 1e, 1f) in at least one compression cylinder (2a, 2b), in which device a) at least one drive piston (13a, 13b) is disposed in each of at least two drive cylinders (12a, 12b), which piston separates the at least two drive cylinders (12a, 12b) each into two drive chambers (11a, 11b, 11c, 11d), and b) wherein fluid pressure can be applied periodically to the at least one first and second drive chambers (11a, 11b, 11c, 11d) using a hydraulic fluid to move the respective drive piston (13a, 13b), and c) the remaining drive chambers (11c, 11d, 11a, 11b) in the at least two drive cylinders (12a, 12b) are force connected to each other by a fluid via a connection piece (15), and d) the movement of the drive pistons (13a, 13b) can be transferred via at least one mechanical connection means (20a, 20b) to at least one compression piston (3a, 3b) which is arranged movably in the at least one compression cylinder (2a, 2b) and on one side movably delimits the at least one compression chamber (1a, 1b, 1c, 1d, 1e, 1f) in the at least one compression cylinder (2a, 2b) so that movements of the drive pistons (13a, 13b) can be converted into a change in the volume of the at least one compression chamber (1a, 1b), e) wherein the at least one compression cylinder (2a, 2b) is disposed spatially separated from the at least two drive cylinders (12a, 12b) by a distance (Da, Db), characterised in that there is at least one connecting chamber (30a, 30b) which is filled with a functional gas between the at least one compression cylinder (2a, 2b) and the at least two drive cylinders (12a, 12b). The invention also relates to a compression method.

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