

Title (en)

METHOD FOR SEPARATING AIR BY CRYOGENIC DISTILLATION

Title (de)

VERFAHREN ZUR TRENNUNG VON LUFT DURCH KRYOGENE DESTILLATION

Title (fr)

PROCEDE DE SEPARATION D'AIR PAR DISTILLATION CRYOGENIQUE

Publication

EP 3695180 B1 20240605 (FR)

Application

EP 18773240 A 20180830

Priority

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Abstract (en)

[origin: WO2019073132A1] In a method for separating air by cryogenic distillation, a flow of gas, which is air or a gas coming from the system of columns, is expanded in a single-wheel cryogenic expansion turbine having an inlet temperature less than -100°C, a gas, which is air or a gas coming from the system of columns, is compressed in a first single-wheel booster compressor (B1) with an inlet temperature greater than -50°C, the air is compressed in a second single-wheel booster compressor (B2) with an inlet temperature less than -100°C, the compressed air in at least the first booster compressor cools in the heat exchanger, the work generated by the expansion turbine (T) is used for the cryogenic compression step in the first booster compressor and for the compression step in the second booster compressor, and the wheel of the first booster compressor, the wheel of the second booster compressor and the wheel of the turbine are mounted on the same axis of rotation.

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