

Title (en)
ARGON PRODUCING AIR DISTILLATION UNIT

Publication
EP 0410831 B1 19920826 (FR)

Application
EP 90401933 A 19900704

Priority
FR 8910221 A 19890728

Abstract (en)
[origin: JPH0367984A] PURPOSE: To stably operate an air distillation double column, by providing an auxiliary column section having a top-section auxiliary evaporator, supplying an oxygen-poor second liquid collected in a mean pressure column to the auxiliary evaporator, and, at the same time, returning the liquid in the liquid reservoir of the auxiliary column section to an impure argon manufacturing column. CONSTITUTION: A column 2 for producing impure argon is housed in an outer pipe 6 and has a top-section main condenser 7. The outer pipe 6 is extended over the condenser 7 by means of an auxiliary outer pipe 8, and the pipe 8 has a fractionating plate and restricts an auxiliary fractionating section 9 provided with a top-section auxiliary condenser 10. A poor liquid (oxygen-poor liquid) composed mostly of pure nitrogen is taken out of the top section of a means pressure column 3 through a pipeline 12 and expanded in an expansion valve 13, and part of the expanded poor liquid is sent to the condenser 10 through a pipeline 15 provided with a valve 16 and, after being vaporized, sent to a low-pressure column 4 through a pipeline 17. An oxygen-rich liquid is taken out of the liquid reservoir of the mean pressure column 3 through a pipeline 18 and expanded in an expansion valve 9, and part of the expanded oxygen-rich liquid is sent to the condenser 7 and, after being vaporized, to the low-pressure column 4 through a pipeline 21.

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F25J 3/04

IPC 8 full level
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CPC (source: EP US)
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Cited by
US5386686A; CN112066644A; US11988446B2

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