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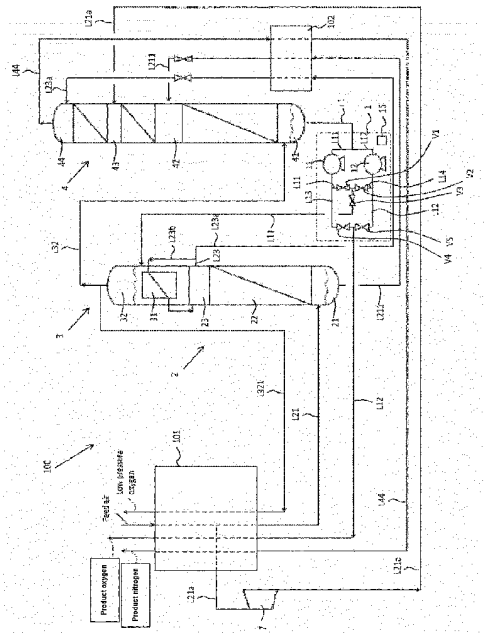
(54) AIR SEPARATION UNIT AND PROCESS FOR PRODUCING A PRODUCT GAS FROM FEED AIR BY CRYOGENIC DISTILLATION

(57) An air separation unit comprises a first rectification column (2), having a top condenser (31) and a second rectification column (4) placed side by side, a heat exchanger (101), a first pump (11) and a second pump (12) connected in parallel, the first pump being capable of producing liquid at a first liquid pressure and the second pump being capable of producing liquid at a second liquid pressure, higher than the first pressure, each pump having an inlet connected to the second column, a first outlet of the first pump being connected to a first outlet conduit (L13), a second outlet of the second pump being connected to a second outlet conduit (L12), the first and second outlet conduits being connected to the condenser section .

[Fig. 1A]



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EUROPEAN SEARCH REPORT

Application Number
EP 24 17 4443

DOCUMENTS CONSIDERED TO BE RELEVANT

	Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
1	X	DE 102 13 212 A1 (LINDE AG [DE]) 17 October 2002 (2002-10-17)	1-7,9-15	INV. F25J1/00
	A	* paragraph [0014]; figure 1 *	8	

TECHNICAL FIELDS SEARCHED (IPC)

F25J

3 The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	7 December 2024	Schopfer, Georg

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 24 17 4443

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