

(19)



(11)

EP 4 495 521 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
23.04.2025 Bulletin 2025/17

(51) International Patent Classification (IPC):
F25J 1/00 ^(2006.01)

(43) Date of publication A2:
22.01.2025 Bulletin 2025/04

(52) Cooperative Patent Classification (CPC):
**F25J 1/001; F25J 1/005; F25J 1/0065;
F25J 1/0067; F25J 1/0072; F25J 1/0077;
F25J 1/0097; F25J 1/0205; F25J 1/0215;
F25J 1/0221; F25J 1/0234; F25J 1/0245;
F25J 3/0409; F25J 3/04175; F25J 3/04296;**

(21) Application number: **24210930.4**

(22) Date of filing: **20.12.2022**

(Cont.)

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL
NO PL PT RO RS SE SI SK SM TR**

(30) Priority: **30.12.2021 US 202163295509 P
26.08.2022 US 202217896953
26.08.2022 US 202217896967**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
22854255.1 / 4 457 478

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Remarks:
MISSING OR CORRECT PARTS INCLUDED
UNDER RULE 56(3) or RULE 56a(4) EPC

(54) **PROCESS FOR PRECOOLING HYDROGEN FOR LIQUEFACTION WITH SUPPLEMENT LIQUID NITROGEN**

(57) A hydrogen feed stream is introduced into a primary refrigeration system of a precooling system and cooling the hydrogen stream to a first precooling temperature. From there, the precooled hydrogen stream is then introduced to a secondary refrigeration system of

the precooling system and cooling the precooled hydrogen stream to a second temperature. Next, the cooled hydrogen stream is then liquefied in the liquefaction system to produce liquid hydrogen.

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(52) Cooperative Patent Classification (CPC): (Cont.)
F25J 3/04412; F25J 3/04539; F25J 3/04563;
F25J 2210/42; F25J 2250/02; F25J 2260/44;
F25J 2270/16



EUROPEAN SEARCH REPORT

Application Number

EP 24 21 0930

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			F25J
Place of search		Date of completion of the search	Examiner
Munich		12 March 2025	Schopfer, Georg
CATEGORY OF CITED DOCUMENTS		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	
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			

EPO FORM 1503 03.82 (P04C01)

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

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82