

Title (en)
METHOD OF COOLING BOIL OFF GAS AND AN APPARATUS THEREFOR

Title (de)
VERFAHREN ZUR KÜHLUNG VON BOIL-OFF-GAS UND VORRICHTUNG DAFÜR

Title (fr)
PROCÉDÉ DE REFOUILLISSEMENT DE GAZ D'ÉVAPORATION, ET APPAREIL POUR CE DERNIER

Publication
EP 3183489 B1 20191204 (EN)

Application
EP 15756225 A 20150821

Priority
• GB 201414893 A 20140821
• GB 2015052429 W 20150821

Abstract (en)
[origin: WO2016027098A1] A method of cooling a boil off gas stream from a liquefied ethane cargo in a floating transportation vessel, said method comprising at least the steps of: compressing a boil off gas stream from said liquefied ethane cargo in two or more stages of compression comprising at least a first stage and a final stage to provide a compressed BOG discharge stream, wherein said first stage of compression has a first stage discharge pressure and said final stage of compression has a final stage suction pressure and one or more intermediate, optionally cooled, compressed BOG streams are provided between consecutive stages of compression; cooling the compressed BOG discharge stream against one or more first coolant streams to provide a first cooled compressed BOG stream; cooling the first cooled compressed BOG stream against at least one second coolant stream to provide a second cooled compressed BOG stream; cooling the second cooled compressed BOG stream against a third coolant stream to provide a third cooled compressed BOG stream; expanding a portion of the third cooled compressed BOG stream to a pressure between that of the first stage discharge pressure and the final stage suction pressure to provide a first expanded cooled BOG stream; using the first expanded cooled BOG stream as the third coolant stream to provide a first expanded heated BOG stream; and using the first expanded heated BOG stream as the or a second coolant stream.

IPC 8 full level
F17C 7/04 (2006.01); **F17C 3/02** (2006.01); **F17C 9/04** (2006.01); **F17C 13/00** (2006.01)

CPC (source: CN EP KR)
F17C 13/004 (2013.01 - CN EP KR); **F25J 1/0025** (2013.01 - EP); **F25J 1/0045** (2013.01 - EP); **F25J 1/0052** (2013.01 - EP); **F25J 1/0087** (2013.01 - EP); **F25J 1/0097** (2013.01 - EP); **F25J 1/0208** (2013.01 - EP); **F25J 1/023** (2013.01 - EP); **F25J 1/0277** (2013.01 - EP); **F25J 1/0292** (2013.01 - EP); **F17C 2221/032** (2013.01 - KR); **F17C 2250/032** (2013.01 - CN EP KR); **F17C 2260/056** (2013.01 - CN EP KR); **F17C 2265/031** (2013.01 - CN EP KR); **F17C 2265/034** (2013.01 - CN EP KR); **F17C 2265/037** (2013.01 - CN EP KR); **F17C 2265/038** (2013.01 - CN EP KR); **F17C 2270/0105** (2013.01 - CN EP KR); **F17C 2270/011** (2013.01 - CN EP KR); **F25J 2210/04** (2013.01 - EP); **F25J 2215/62** (2013.01 - EP); **F25J 2215/64** (2013.01 - EP); **F25J 2230/04** (2013.01 - EP); **F25J 2230/08** (2013.01 - EP); **F25J 2230/30** (2013.01 - EP); **F25J 2235/60** (2013.01 - EP); **F25J 2270/90** (2013.01 - EP)

Cited by
WO2021038220A3

Designated contracting state (EPC)
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 MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2016027098 A1 20160225; CN 107208841 A 20170926; CN 107208841 B 20200616; EP 3183489 A1 20170628; EP 3183489 B1 20191204; GB 201414893 D0 20141008; JP 2017525910 A 20170907; JP 6553714 B2 20190731; KR 102379711 B1 20220325; KR 20170043637 A 20170421

DOCDB simple family (application)
GB 2015052429 W 20150821; CN 201580050405 A 20150821; EP 15756225 A 20150821; GB 201414893 A 20140821; JP 2017510369 A 20150821; KR 20177007660 A 20150821