

Title (en)
PROCESS FOR PRODUCING A SUBSTITUTE NATURAL GAS

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES ERDGASSUBSTITUTS

Title (fr)
PROCÉDÉ DE PRODUCTION D'UN SUBSTITUT AU GAZ NATUREL

Publication
EP 3265545 B1 20181017 (EN)

Application
EP 16707531 A 20160225

Priority
• GB 201503607 A 20150303
• GB 2016050480 W 20160225

Abstract (en)
[origin: WO2016139452A1] A process is described for producing a substitute natural gas comprising the steps of: feeding a first synthesis gas feed stream comprising hydrogen, methane, carbon monoxide and/or carbon dioxide in parallel to two or more bulk methanators in a first bulk methanation zone comprising a first bulk methanator and a final bulk methanator, feeding a second synthesis gas feed stream comprising hydrogen, carbon monoxide and/or carbon dioxide to one or more bulk methanators in a second bulk methanation zone comprising a first bulk methanator, each bulk methanator containing a methanation catalyst such that the feed streams are at least partially methanated, dividing the methanated gas stream recovered from the final bulk methanator in the first bulk methanation zone into a first portion and a second portion, recirculating the first portion in a recirculation loop to the first bulk methanator of the first bulk methanation zone to dilute the first synthesis gas feed stream fed to said first bulk methanator, and feeding the second portion to the first bulk methanator of the second bulk methanation zone to dilute the second synthesis gas feed stream fed to said first bulk methanator, wherein the feed pressure of the second synthesis gas feed stream is lower than the feed pressure of the first synthesis gas feed stream and the difference in pressure between the first and second feed streams is at least the pressure drop through the first bulk methanation zone.

IPC 8 full level
C10L 3/08 (2006.01)

CPC (source: CN EP GB)
C10L 3/08 (2013.01 - CN EP GB); **C10L 2290/04** (2013.01 - CN EP); **C10L 2290/06** (2013.01 - CN EP); **C10L 2290/10** (2013.01 - CN EP); **C10L 2290/148** (2013.01 - CN EP); **C10L 2290/46** (2013.01 - CN EP)

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 2016139452 A1 20160909; CN 107406780 A 20171128; CN 107406780 B 20200605; EP 3265545 A1 20180110; EP 3265545 B1 20181017; GB 201503607 D0 20150415; GB 201603253 D0 20160413; GB 2537220 A 20161012; GB 2537220 B 20170426

DOCDB simple family (application)
GB 2016050480 W 20160225; CN 201680012969 A 20160225; EP 16707531 A 20160225; GB 201503607 A 20150303; GB 201603253 A 20160225