Title (en)
METHOD FOR UTILIZING THERMAL ENERGY OF PRODUCT GASES IN A BTL PLANT

Title (de)
VERFAHREN ZUR NUTZUNG VON WÄRMEENERGIE AUS PRODUKTGASEN IN EINER BTL-ANLAGE

Title (fr)
PROCÉDÉ D'UTILISATION DE L'ÉNERGIE THERMIQUE DES GAZ EN PRODUIT DANS UNE USINE APPARTENANT À LA FILIÈRE BTL

Publication
EP 2663619 A1 20131120 (EN)

Application
EP 11855609 A 20111223

Priority
• FI 20115038 A 20110114
• FI 2011051154 W 20111223

Abstract (en)
[origin: WO2012095556A1] The invention for utilizing thermal energy of gases generated in a BtL plant. The characterizing feature of the invention is that the thermal energy of discharge gas streams generated in the BtL plant is used for driving various compressor machineries and/or electricity generation, whereby the plant can operate as a stand-alone facility.

IPC 8 full level
C10J 3/86 (2006.01); C10B 53/02 (2006.01); C10J 3/82 (2006.01); C10L 5/40 (2006.01); F22D 1/32 (2006.01)

CPC (source: EP FI US)
C10J 3/726 (2013.01 - EP US); C10J 3/82 (2013.01 - FI); C10J 3/86 (2013.01 - FI); C10K 1/024 (2013.01 - EP US); C10K 3/00 (2013.01 - EP US); C10K 3/04 (2013.01 - EP US); C10L 5/40 (2013.01 - FI); F01K 13/00 (2013.01 - EP US); F01K 17/06 (2013.01 - EP US); F22B 1/1846 (2013.01 - US); F22D 1/32 (2013.01 - FI); C01B 2203/0233 (2013.01 - EP US); C01B 2203/0283 (2013.01 - EP US); C01B 2203/043 (2013.01 - EP US); C01B 2203/0465 (2013.01 - EP US); C01B 2203/062 (2013.01 - EP US); C01B 2203/0811 (2013.01 - EP US); C10J 2300/0909 (2013.01 - EP US); C10J 2300/0916 (2013.01 - EP US); C10J 2300/0959 (2013.01 - EP US); C10J 2300/1621 (2013.01 - EP US); C10J 2300/1659 (2013.01 - EP US); C10J 2300/1687 (2013.01 - EP US); C10J 2300/1846 (2013.01 - EP US); Y02E 20/14 (2013.01 - EP US); Y02E 50/10 (2013.01 - EP US); Y02E 50/30 (2013.01 - EP US); Y02P 20/129 (2015.11 - EP US)

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 2012095556 A1 20120719; AU 2011355175 A1 20130718; BR 112013017056 A2 20190924; CA 2823444 A1 20120719; CN 103380198 A 20131030; EP 2663619 A1 20131120; EP 2663619 A4 20140625; FI 20115038 A0 20110114; FI 20115038 L 20120715; RU 2013137861 A 20150220; US 2013291808 A1 20131107

DOCDB simple family (application)
FI 2011051154 W 20111223; AU 2011355175 A 20111223; BR 112013017056 A 20111223; CA 2823444 A 20111223; CN 201180064830 A 20111223; EP 11855609 A 20111223; FI 20115038 A 20110114; RU 2013137861 A 20111223; US 201113978348 A 20111223