

Title (en)
METHOD FOR PURIFYING SYNTHESIS GASES

Title (de)
VERFAHREN ZUR REINIGUNG VON SYNTHESGASEN

Title (fr)
PROCÉDÉ DE PURIFICATION DE GAZ DE SYNTHÈSE

Publication
EP 2997113 A1 20160323 (DE)

Application
EP 14728437 A 20140507

Priority
• DE 102013008422 A 20130516
• EP 2014001223 W 20140507

Abstract (en)
[origin: CA2912272A1] The method serves for purifying dust-bearing synthesis gases (1) formed in reactors or shaft furnaces (2) by carbothermal and/or electrothermal processes, freed from dusty solids (4) by physical separation techniques (3) at elevated temperatures after leaving the reactor or shaft furnace, and cooled using downstream heat exchanger (5). To attain long filter life while effectively purifying the synthesis gas, the proposal is to lead the dust-bearing synthesis gas (1) over a dwell-time section (6) after it has left the reactor (2) and before it has been freed from dusty solids, in the presence of steam, with the difference between the final synthesis gas temperature (T3) after freeing from the dusty solids and cooling and the maximum gas temperature in the dwell-time section (T2) being set at not less than 400 K.

IPC 8 full level
C10J 3/02 (2006.01); **C10K 1/02** (2006.01); **C10K 3/00** (2006.01)

CPC (source: EP US)
B01D 39/2068 (2013.01 - US); **B01D 46/46** (2013.01 - US); **B01D 53/002** (2013.01 - US); **C10J 3/02** (2013.01 - EP US); **C10K 1/024** (2013.01 - EP US); **C10K 3/006** (2013.01 - EP US); **C10K 3/008** (2013.01 - US)

Citation (search report)
See references of WO 2014183847A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102013008422 A1 20141120; CA 2912272 A1 20141120; CN 105358662 A 20160224; EP 2997113 A1 20160323; JP 2016521310 A 20160721; US 2016168494 A1 20160616; WO 2014183847 A1 20141120; ZA 201508403 B 20161026

DOCDB simple family (application)
DE 102013008422 A 20130516; CA 2912272 A 20140507; CN 201480032857 A 20140507; EP 14728437 A 20140507; EP 2014001223 W 20140507; JP 2016513248 A 20140507; US 201414891090 A 20140507; ZA 201508403 A 20151113