

Title (en)

PROCESS AND APPARATUS FOR INJECTING OXYGEN INTO A REACTION GAS FLOWING THROUGH A SYNTHESIS REACTOR

Title (de)

VERFAHREN UND VORRICHTUNG ZUM EINDÜSEN VON SAUERSTOFF IN EIN EINEN SYNTHESEREAKTOR DURCHSTRÖMENDES REAKTIONSGAS

Title (fr)

PROCÉDÉ ET DISPOSITIF D'INJECTION D'OXYGÈNE DANS UN GAZ DE RÉACTION QUI TRAVERSE UN RÉACTEUR DE SYNTHÈSE

Publication

EP 2089148 A1 20090819 (DE)

Application

EP 07819574 A 20071105

Priority

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- DE 102006054415 A 20061116

Abstract (en)

[origin: WO2008058646A1] Synthesis reactor comprising an apparatus for injecting oxygen, which can be initially charged in pure form, as air, or mixed with inert gas or water vapor, into a reaction gas which can flow through the synthesis reactor which finds use, for example, in an oxydehydrogenation plant, wherein oxygen and reaction gas have different temperatures, wherein a distributor element is provided upstream of the device for accommodating a catalyst charge in flow direction of the reaction gas, said distributor element comprising a distributor body, two tube plates and a multitude of gas guide tubes for passing the reaction gas through, and the oxygen can be supplied to the chamber between the gas guide tubes, wherein at least one baffle plate is arranged orthogonally to the gas guide tubes and divides the intermediate space into at least two distributor chambers, wherein the distributor chambers are connected to one another or merge into one another fluidically through one or more orifices, at least one gas line leads into the first distributor space in flow direction, through which the oxygen can be supplied, and the lower tube plate is provided in flow direction with a multitude of orifices in the form of nozzles, bores or the like, through which the oxygen can leave the intermediate space, wherein a solids-free gas mixing zone is provided below the lower tube plate.

IPC 8 full level

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Citation (search report)

See references of WO 2008058646A1

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