

Title (en)
PROCESS FOR UPGRADING HEAVY OIL AND BITUMEN PRODUCTS

Title (de)
VERFAHREN ZUR VEREDELUNG VON SCHWERÖL- UND BITUMENPRODUKTEN

Title (fr)
PROCÉDÉ POUR LA VALORISATION DE PRODUITS DE PÉTROLE LOURD ET DE BITUME

Publication
EP 2361292 A4 20140521 (EN)

Application
EP 08878057 A 20081114

Priority
CA 2008002022 W 20081114

Abstract (en)
[origin: WO2010054464A1] A process for upgrading bitumen recovered from an oil reservoir without hydrogen production is particularly useful in field upgrading applications. In this process, recovered bitumen enters a fractionator and is contacted with heated gases from a fluidized bed reactor. The bitumen and heated gases are fractionated into segregated products including at least a liquid pitch, unstable fractions, and an upgraded liquid product. The liquid pitch is introduced into the reactor to produce a vapor phase liquid product; the reactor comprises solid particles moving through the reactor and a fluidizing gas fluidizing the solid particles at a conversion temperature which is suitable for facilitating the conversion of at least some of the liquid pitch into the vapor phase liquid product. The heated gases comprising the vapor phase liquid product and fluidizing gas are directed from the reactor to the fractionator to contact the bitumen stream. In this process, enough of the segregated unstable fractions are burned that the liquid product and any remaining unstable fractions meets pipeline specifications without hydrogen treatment of any of the remaining unstable fractions.

IPC 8 full level
C10G 1/02 (2006.01); **B01J 8/18** (2006.01); **C10B 53/06** (2006.01); **C10G 7/00** (2006.01); **C10G 9/32** (2006.01); **C10G 11/18** (2006.01); **C10G 70/00** (2006.01)

CPC (source: EP US)
B01J 8/36 (2013.01 - EP US); **C10G 1/002** (2013.01 - EP US); **C10G 1/02** (2013.01 - EP US); **C10G 7/00** (2013.01 - EP US); **C10G 9/00** (2013.01 - EP US); **C10G 9/32** (2013.01 - EP US); **C10G 11/18** (2013.01 - EP US); **C10G 51/023** (2013.01 - EP US); **C10G 70/00** (2013.01 - EP US); **C10G 2400/02** (2013.01 - EP US)

Citation (search report)
• [X] WO 2007021441 A2 20070222 - UOP LLC [US], et al
• [I] US 5431812 A 19950711 - ABRAHAM OORIAPADICAL C [US]
• See references of WO 2010054464A1

Designated contracting state (EPC)
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