Title (en)

NITROGEN LIQUEFIER RETROFIT FOR AN AIR SEPARATION PLANT

Title (de)

STICKSTOFFVERFLÜSSIGERNACHRÜSTUNG FÜR EINE LUFTTRENNANLAGE

Title (fr)

MONTAGE A POSTERIORI D'UN LIQUÉFACTEUR D'AZOTE DANS UNE INSTALLATION DE SÉPARATION D'AIR

Publication

EP 2307835 B1 20120307 (EN)

Application

EP 09773952 A 20090512

Priority

• US 2009043558 W 20090512
• US 16426908 A 20080630

Abstract (en)

[origin: US2009320520A1] A method is disclosed for increasing liquid production involving retrofitting an existing air separation plant with a nitrogen liquefier. The nitrogen liquefier liquefies a nitrogen-rich vapor stream withdrawn from the higher pressure column to return a nitrogen-rich liquid stream to the higher pressure column. This increases liquid nitrogen reflux to the higher pressure column to in turn increase the production of liquid oxygen containing column bottoms of the higher pressure column and therefore, the production of oxygen-rich liquid in the lower pressure column. The increased production of the oxygen-rich liquid allows a liquid oxygen product to be taken at an increased rate or for the liquid oxygen product to be taken in the first instance, if the plant is not designed to produce such a product. Also liquid nitrogen and argon products can be produced at an increased rate as a result of the retrofit.

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP US)

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