Title (en)

Power savings for gas separation at turndown

Title (de)

Leistungsersparnisse für die Gastrennung bei Teillastbetrieb

Title (fr)

Economies de puissance pour la séparation de gaz à charge partielle

Publication

EP 1020695 B1 20031008 (EN)

Application

EP 99300202 A 19990112

Priority

EP 99300202 A 19990112

Abstract (en)

[origin: EP1020695A1] Cryogenic gas separation to provide product (105,106) at design pressure is selectively operated at design flow or at turndown, especially at greater than 30% turndown (less than 70% design flow), by suction throttling (10) the supply feed compressor (1) at turndown to reduce the supply feed (102) pressure to the distillation column system (3,4,5,6) and operating the system at sufficiently reduced product (105,106) recovery to maintain the product pressure. Preferably, the compressor (1) has variable angle guide vanes permitting up to 30% turndown before suction throttling (10) the compressor (1) to allow greater turndown without compressor surge. The arrangement has particular application to dual column nitrogen generators. <IMAGE>

IPC 1-7

F25J 3/04

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP)

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Cited by

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