

Title (en)

A process for recovering heat from the effluent of a hydrocarbon pyrolysis reactor.

Title (de)

Verfahren zum Wiedergewinnen von Wärme aus dem Abfluss eines Kohlenwasserstoff-Pyrolyse-Reaktors.

Title (fr)

Procédé pour la récupération de chaleur d'un effluent d'un réacteur de pyrolyse d'hydrocarbures.

Publication

EP 0031609 A1 19810708 (EN)

Application

EP 80201154 A 19801204

Priority

- US 10606079 A 19791221
- US 10629179 A 19791221

Abstract (en)

A process of efficiently recovering heat from hydrocarbon pyrolysis effluent (3), whilst lessening coking problems, by cooling the effluent (3) in two quenchers, in the first (4) indirectly to at least 540 DEG C with production of high pressure steam (6) and in the second (8) to at least 370 DEG C, the second quencher (8) comprising a direct quench section (9) giving an effluent quench liquid mixture of at least 400 DEG C, followed by an indirect quench section (11) producing high pressure steam (13); then, the effluent quench liquid mixture is fractionally distilled (17) and a bleed stream (22) from the distillation (17) is cooled and returned to the distillation. Coking materials may be removed from the bottoms (21) of the fractionating column by adding aromatic hydrocarbons (27) and separating off the precipitate then formed; the bottoms thus treated can be used as quench liquid (19).

IPC 1-7

C10G 9/00

IPC 8 full level

C10G 9/00 (2006.01); **F28C 3/06** (2006.01)

CPC (source: EP)

C10G 9/002 (2013.01); **F28C 3/06** (2013.01); **F28D 2021/0075** (2013.01)

Citation (search report)

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- US 3725491 A 19730403 - GUNTHER K, et al
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