

Title (en)

SPLIT-FEED TWO-STAGE PARALLEL AROMATIZATION FOR MAXIMUM PARA-XYLENE YIELD

Title (de)

ZWEISTUFIGE AROMATISATION FÜR MAXIMALE PARA-XYLEN-AUSBEUTE MIT GETEILTER EINSPEISUNG

Title (fr)

AROMATISATION A CHARGE PARTAGEE, EN DEUX ETAPES POUR RENDEMENT MAXIMAL EN PARAXYLENE

Publication

EP 0993500 B1 20020918 (EN)

Application

EP 97929844 A 19970616

Priority

US 9709890 W 19970616

Abstract (en)

[origin: WO9858041A1] A full boiling hydrocarbon feed is reformed to enhance para-xylene and benzene yields. First, the hydrocarbon feed is separated into a C5- cut, a C6-C7 cut, and a C8+ cut. The C6-C7 cut has less than 5 lv. % of C8+ hydrocarbon, and the C8+ cut has less than 10 lv. % of C7- hydrocarbon. The C6-C7 cut is subjected to catalytic aromatization at elevated temperatures in a first reformer in the presence of hydrogen and using a non-acidic catalyst comprising at least one Group VIII metal and a non-acidic zeolite support to produce a first reformat stream; and the C8+ cut is subjected to catalytic aromatization at elevated temperatures in a second reformer in the presence of hydrogen and using an acidic catalyst comprising at least one Group VIII metal and a metallic oxide support to produce a second reformat stream. Less than 20 wt.% of the total amount of C8 aromatics produced in the first and second reformer is ethylbenzene, and more than 20 wt.% of the total amount of xylenes produced in the first and second reformer are para-xylenes.

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C10G 59/06

IPC 8 full level

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