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12/568,007 28 September 2009 (28.09.2009) US(71) Applicant (for all designated States except US): **FINA TECHNOLOGY, INC.** [US/US]; P. O. Box 674412, Houston, TX 77267-4412 (US).

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Declarations under Rule 4.17:

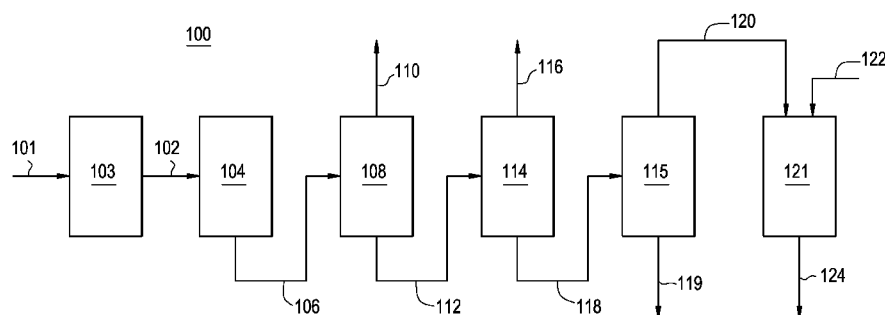
— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: PROCESS FOR ETHYLBENZENE PRODUCTION

FIG. 2



(57) Abstract: A method of producing an alkylaromatic by the alkylation of an aromatic with an alkylating agent, such as producing ethylbenzene by an alkylation reaction of benzene, is disclosed. The method includes using an H-beta catalyst to minimize process upsets due to alkylation catalyst deactivation and the resulting catalyst regeneration or replacement. The H-beta catalyst can be used in a preliminary alkylation reactor that is located upstream of the primary alkylation reactor. The H-beta catalyst used in a preliminary alkylation reactor can reduce the deactivation of the catalyst in the primary alkylation reactor.