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(54) Title: PROCESSES FOR THE MANUFACTURE OF ISOBUTYLENE, POLYISOBUTYLENE, AND DERIVATIVES THERE-
OF

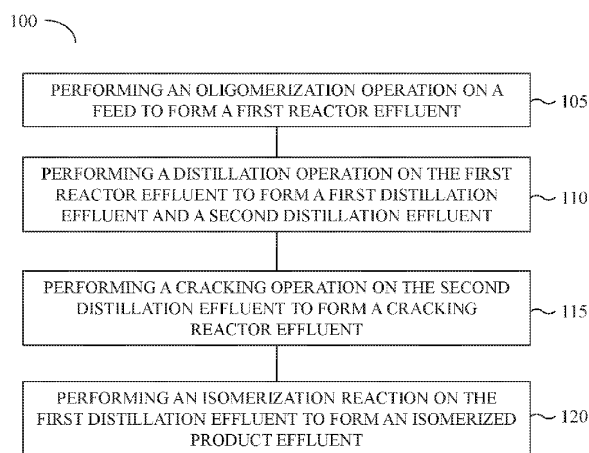


Fig. 1

(57) Abstract: In an embodiment, a process to convert a feed includes introducing a feed to an oligomerization catalyst in an oligomerization reactor to form a first reactor effluent; introducing the first reactor effluent to a distillation unit to form a first distillation effluent and a second distillation effluent, the second distillation effluent comprising an oligomer of isobutylene; and introducing the second distillation effluent to a cracking reactor to form a cracking reactor effluent comprising a high purity isobutylene. In another embodiment, an apparatus includes a feed line coupled to a first end of an oligomerization reactor; a first distillation unit coupled with a second end of the oligomerization reactor; a first end of a cracking reactor coupled to a second end of the first distillation unit via a first line; a first end of an isomerization reactor coupled to: a third end of the first distillation unit and the feed line.

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