

Title (en)

PROCESS FOR CONVERSION OF WASTE PLASTICS INTO HYDROCARBONS

Title (de)

VERFAHREN ZUR UMWANDLUNG VON KUNSTSTOFFABFÄLLEN IN KOHLENWASSERSTOFFE

Title (fr)

PROCESSUS DE CONVERSION DE DÉCHETS PLASTIQUES EN HYDROCARBURES

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Application

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Abstract (en)

[origin: WO2022268663A1] The present invention relates to a process for production of chemical feedstocks from waste plastics, the process comprising providing a process configuration comprising a fractionation tower (1), a furnace (2), one or more coke drum(s) (3), and a pre-reactor (4), configured so that a bottoms stream (A) from the fractionation tower is mixed with an oligomeric stream (L) and supplied to the furnace, the product stream from the furnace (C) is supplied to a coke drum, and an overhead stream (D) from the coke drum is supplied back to the fractionation tower; wherein the oligomeric stream (L) is obtained as product stream from conversion of a waste plastics stream (B) in the pre-reactor, and has a weight average molecular weight of between 5,000 and 10,000 g/mol. Such process allows for the conversion of a wide variety of waste plastics into valuable chemical products. Furthermore, such process allows for the increase in production of naphtha-range hydrocarbon products that may be used for production of for example new thermoplastic polymer product via conversion in steam cracker facilities.

IPC 8 full level

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