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- (71) Applicant: EXXONMOBIL CHEMICAL PATENTS INC. [US/US]; 5200 Bayway Drive, Baytown, TX 77520-52000 (US).
- (72) Inventors: MATHYS, Georges; Eikenboomlaan 66, B-3360 Bierbeek (BE). GODSMARK, John, Stephen; Champs de Maubroux 18, B-1390 Grez Doiceau (BE). JANSSEN, Marcel; Domeinstraat 84, B-3010 Kessel Lo (BE). MARTENS, Luc, Roger; Prinsenbeemdlaan 3, B-1860 Meise (BE). BECKERS, Hubertus, Joseph; Bollostraat 6, B-3140 Keerbergen (BE). VAN DRIESSE, Eddy, Theophile, Andrea; Krekelmuit, B-9900 Ecklo (BE). CAERS, Raphael, Frans, Ivo; Prins Boudewijnlaan 189, B-2620 Edegem (BE). SHUTT, John, Richard; Eikestraat 11, B-3080 (BE).
- (74) Agents: LAVOIE, Paul, T.; ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX 77522-2149 et al. (US).
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ACTION

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(54) Title: PRODUCTION OF HIGHER OLEFINS

(57) Abstract: A method of making a higher olefin product from a C₄⁺ fraction separated from the hydrocarbon product produced by an oxygenate to olefin reaction unit. The C₄⁺ fraction primarily contains butenes which may be directed to a higher olefin reaction unit without removing isobutenes, butanes, and/or butadiene. The C₄⁺ fraction is particularly well suited for the production of higher olefins because of its high olefin content, low branching number, and low contaminant levels. The invention is also directed to an olefin product composition that is produced by contacting the C₄⁺ fraction with an oligomerization catalyst. The olefin composition is characterized by a relatively high octene content, and octene with a branching number less than 1.4.