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(54) Title: OLEFIN METATHESIS PROCESS AND CATALYST CONTAINING TUNGSTEN FLUORINE BONDS

(57) Abstract: A process and catalyst for the metathesis of olefins in general and specifically for the production of propylene from ethylene and butylene has been developed. The catalyst comprises a tungsten metal compound, which contains at least one tungsten-fluoro bond, dispersed or grafted onto a support. A specific example of the catalyst is the compound $\text{WOF}(\text{CH}_2\text{CMe}_3)_3$ grafted onto a silica support.



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