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(54) Title: A PROCESS FOR THE ISOMERIZATION OF A VINYLIDENE OLEFIN

(57) Abstract: A process for the double bond isomerization of a vinylidene olefin, comprising contacting a feed comprising the vinylidene olefin with an isomerization catalyst which comprises a molecular sieve in an acidic form, which molecular sieve comprises pores which have a pore size of more than 0.6 nm; and a process for treating an olefin mixture which comprises a linear α -olefin and a vinylidene olefin which is isomeric to the linear α -olefin and which is of the general formula $\text{CH}_2=\text{C}(\text{R}^1)\text{R}^2$, wherein R^1 represents an ethyl group and R^2 represents a linear 1-alkyl group, which process comprises isomerizing the vinylidene olefin to form a double bond isomer of the vinylidene olefin by contacting a feed comprising the olefin mixture with an isomerization catalyst which comprises a molecular sieve in an acidic form, which molecular sieve comprises pores which have a pore size of more than 0.6 nm, and separating the linear α -olefin from the double bond isomer of the vinylidene olefin.



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