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(54) Title: A PROCESS FOR PREPARING A CATALYST, THE CATALYST, AND A PROCESS FOR THE PRODUCTION OF AN OLEFIN OXIDE, A 1,2-DIOL, A 1,2-DIOL ETHER, OR AN ALKANOLAMINE

(57) Abstract: A process for preparing a catalyst comprising depositing a metal on a carrier prepared by: - treating one or more thermally decomposable materials in particulate form comprising potassium under conditions sufficient to reduce the total quantity of potassium in the thermally decomposable material, - preparing a mixture comprising the treated thermally decomposable material and a heat sinterable material, and - heating the mixture to sinter the heat sinterable material and to thermally decompose the treated thermally decomposable material to form the carrier; the catalyst; a process for preparing an olefin oxide by reacting an olefin with oxygen in the presence of the catalyst; and a method of using an olefin oxide for making a 1,2- alkanediol, a 1,2-alkanediol ether or an alkanolamine.

WO 2007/095453 A3