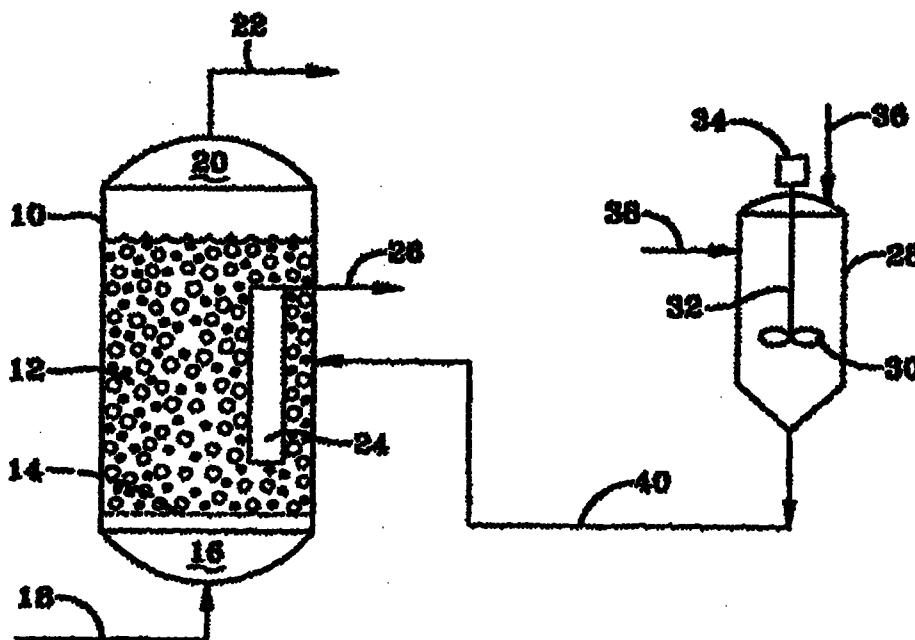




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: SMALL CATALYST PARTICLE ADDITION TO SLURRY REACTOR



## (57) Abstract

Small particle size catalysts having an average particle size of less than 20 or 10 microns, which agglomerate when contacted with a hydrocarbon liquid, are easily dispersed in the hydrocarbon liquid by first forming a mixture comprising the catalyst particles and one or more non-acidic, liquid polar oxygenates, such as an alcohol, ketone, ester, ether or mixture thereof. The mixture is contacted with the hydrocarbon liquid in which the particles then readily disperse. This process is useful for adding fresh or regenerated small particle size catalyst to catalytic hydroprocessing process slurries, including a reactive Fischer-Tropsch hydrocarbon synthesis slurry. One to four carbon atom alcohols are preferred oxygenates for use with a Fischer-Tropsch slurry.