

SURFACE ACTIVE AGENTS DERIVED FROM BIODIESEL-BASED ALKYLATED AROMATIC COMPOUNDS

ABSTRACT OF THE DISCLOSURE

- 5 A surface active agent comprising an arylated methyl ester of a fatty acid, or
mixture of fatty acids, derived from biodiesel or a triglyceride source is disclosed. The
fatty acid mixture is condensed to methyl esters and alkylated with aromatic
substituents under Friedel-Crafts conditions. The alkylated methyl esters may be
alkoxylated using a catalyst derived from fatty acids, alkaline earth salts, and strong
10 acids. The resulting nonionic surfactant may also be sulfonated to produce one class
of anionic surfactants. The alkylated methyl esters may also be directly sulfonated to
produce another class of anionic surfactants.

No figure.