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(54) Title: FATTY AMIDES AND DERIVATIVES FROM NATURAL OIL METATHESIS

(57) Abstract: Fatty amide compositions and their derivatives are disclosed. The fatty amides comprise a reaction product of a metathesis-derived C₁₀-C₁₇ monounsaturated acid, octadecene-1,18-dioic acid, or their ester derivatives with a primary or secondary amine. Derivatives made by reducing, quaternizing, sulfonating, alkoxylation, sulfating, and sulfitating the fatty amide are also included. The amine reactant can be diethylenetriamine or (2-aminoethyl)ethanolamine, which provide imidazoline amides or esters, respectively. In one aspect, the ester derivative of the C₁₀-C₁₇ monounsaturated acid or octadecene-1,18-dioic acid is a lower alkyl ester. In other aspects, the ester derivative is a modified triglyceride made by self-metathesis of a natural oil or an unsaturated triglyceride made by cross-metathesis of a natural oil with an olefin. The compositions are valuable for cleaners, fabric treatment, hair conditioning, personal care, antimicrobial compositions, agricultural uses, and oil field applications.

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