supplied as a concentrate and would complement commercially available aqueous hard surface cleaners to avoid the need to reformulate.

SUMMARY OF THE INVENTION

In one aspect, the invention relates to aqueous hard surface cleaner compositions. The compositions comprise 75 to 99 wt.% of water; 0.1 to 5 wt.% of a monoterpene; 0.1 to 5 wt.% of a C_{10}-C_{17} fatty acid derivative; and 0.1 to 5 wt.% of one or more surfactants selected from anionic, cationic, nonionic, and amphoteric surfactants. The fatty acid derivative is selected from N,N-dialkyl amides, N,N-dialkyl esteramines, and N,N-dialkyl amidoamines. Preferably, a base such as sodium carbonate or monoethanolamine is also included. In another aspect, the invention relates to dilutable hard surface cleaner concentrates. The concentrates comprise 1 to 50 wt.% of a monoterpene; 1 to 50 wt.% of a C_{10}-C_{16} fatty acid derivative selected from N,N-dialkyl amides, N,N-dialkyl esteramines, and N,N-dialkyl amidoamines; and 1 to 50 wt.% of one or more surfactants selected from anionic, cationic, nonionic, and amphoteric surfactants.

We surprisingly found that the combination of a monoterpene and certain fatty acid derivatives, especially fatty N,N-dialkyl amides, can enable even dilute aqueous compositions to rapidly decolorize and remove permanent marker from hard, non-porous surfaces. The inventive compositions dramatically extend the reach of commercial all-purpose cleaners.

In other ~~aspects~~embodiments, the ~~invention~~ present disclosure relates to methods for removing permanent ink markings from hard surfaces, graffiti remover compositions, permanent marker/eraser combinations, correction pens, and correction fluids based on the inventive hard surface cleaner compositions. In an aspect, the invention relates to a method for removing permanent ink from a hard surface, comprising applying to the hard surface the cleaner composition as disclosed above and removing the used cleaner composition from the cleaned hard surface. In other aspects, the invention relates to a graffiti remover comprising the cleaner as disclosed above or the concentrate as disclosed above. In other aspects, the invention relates to a permanent marker having an attached eraser that utilizes the cleaner as disclosed

above or the concentrate as disclosed above. In other aspects, the invention relates to a correction pen having a fluid reservoir containing the cleaner as disclosed above or the concentrate as disclosed above. In other aspects, the invention relates to a correction fluid comprising the cleaner as disclosed above or the concentrate as disclosed above.

DETAILED DESCRIPTION OF THE INVENTION

Aqueous hard surface cleaners of the invention are commonly used as all-purpose cleaners intended for use in cleaning kitchens, bathrooms, appliances, and generally any suitably hard, non-porous surface, such as metal, plastic, granite, laminate, linoleum, tile, glass, synthetic rubber, or the like. The compositions comprise 75 to 99 wt.%, preferably 85 to 99 wt.%, more preferably 90 to 99 wt.%, and most