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(54) **Title:** IONIC LIQUIDS AS LUBRICATING OIL BASE STOCKS, COBASE STOCKS AND MULTIFUNCTIONAL FUNCTIONAL FLUIDS

(57) **Abstract:** A composition including an ionic liquid alkyl ammonium salt (e.g., tetraalkylammonium cation and bis(trifluoromethanesulfonyl)imide anion) or an ionic liquid imidazolium salt (e.g., L3-dialkylimidazolium cation and bis(trifluoromethanesulfonyl)imide anion), that have a structure sufficient to exhibit at least partial solubility in one or more Group I-V base stocks. The disclosure also relates to a lubricating oil base stock and lubricating oil containing the composition, a multifunctional functional fluid containing the composition, and a method for improving solubility of an ionic liquid in a lubricating oil by using as the lubricating oil a formulated oil including a lubricating oil base stock as a major component, and an ionic liquid alkylammonium salt cobase stock, or an ionic liquid imidazolium salt cobase stock, as a minor component.

