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(54) Title: A PROCESS AND COMPOSITION FOR CLEANING CONTAMINANTS WITH TERPENE AND MONOBA-
SIC ESTER**(57) Abstract**

An industrial cleaning process in which a contaminant comprising soldering flux and/or adhesive tape residue is removed from a substrate contaminated therewith, for example, a printed circuit board contaminated with rosin flux, comprising: (A) contacting the substrate with a terpene-based cleaning composition which is substantially free of water-soluble organic material, for example, a surfactant, for a period of time sufficient to solubilize the contaminant; (B) removing the composition and solubilized contaminant from the substrate by contact with water having a temperature of about 70 °F to about 140 °F (but preferably lower) for a period of time of no longer than about 10 minutes to provide a substrate having a contamination rating of no greater than about 14 micrograms NaCl equivalent/square inch (MIL-P-28809A), and to thereby form a mixture comprising the composition, contaminant and water; and (C) separating the water from said mixture, the separated water being substantially free of water-soluble organic material and having a chemical oxygen demand of no greater than about 1,000 ppm, and also a cleaning process utilizing a cleaning composition comprising a major amount of a monobasic ester to clean surfaces that are contaminated with an organic residue.

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