#### 5500042

## FLUOROELASTOMER COMPOSITION WITH IMPROVED BONDING PROPERTIES

Grootaert Werner; Kolb Robert E; Millet George H Oakdale, MN, UNITED STATES assigned to Minnesota Mining and Manufacturing Company

A curable fluoroelastomer composition comprising: (A) fluoroelastomer gum comprising interpolymerized, repeating units derived from vinylidene fluoride, tetrafluoroethylene, and copolymerizable hydrocarbon olefin, (B) polyhydroxy compound, (C) organo-onium compound, and (D) fluoroaliphatic sulfonyl compound promoter, where the amount adhesion fluoroaliphatic sulfonyl compound in the elastomeric composition is sufficient to result in greater adhesion of the elastomeric composition, after curing, to an inorganic surface coated with a primer composition comprising aminosilane compound, than can be achieved between an elastomeric composition comprising (A), (B), and (C), after curing, and an inorganic surface coated with said primer composition comprising aminosilane compound.

#### 5500250

# CHEMICALLY ADSORBED FILM AND METHOD OF MANUFACTURING THE SAME

Ogawa Kazufum; Mino Norihisa; Soga Mamoru Hirakata, JAPAN assigned to Matsushita Electric Industrial Co Ltd

Disclosed is an ornament with a thin film formed on the ornament surface. The thin film includes a fluorocarbon-based adsorbed monomolecular film, and the thin film is covalently bonded to the ornament. By contacting the ornament with the non-aqueous solution containing a chlorosilane group at one end and a fluorocarbon chain at the other end, a reaction occurs between hydroxyl groups at the ornament surface and the chlorosilyl groups of the material having a plurality of chlorosilyl grounds. A monomolecular film which is covalently bonded to the ornament surface is thereby obtained. A thin, fluorine-containing, monomolecular

film thus can be formed on the ornament such that it is, chemically bonded to the ornament. The film is anti-contaminating, water-and oil-repelling, durable and does not spoil the intrinsic luster of the ornament.

#### 5500257

# METHOD OF PREPARING A FLUOROPOLYMER COMPOSITE

Krause Edward K; Kuenzel Kenneth Ann Arbor, MI, UNITED STATES assigned to Pilot Industries Inc

Described herein is a method of preparing a fluoropolymer composite tube comprising the steps of activating a formed fluoropolymer substrate by subjecting the substrate to a charged gaseous atmosphere formed by electrically ionizing a gas which contacts the substrate and thereafter applying a layer of a thermoplastic polymer to the activated fluoropolymer substrate. The ionizing step can be described as a corona discharge or an electrically formed plasma. In particular, described is a fuel pipe comprised of an inner fluorocarbon layer having electrostatic discharge resistance and hydrocarbon evaporative emission resistance and on top of and integral with, the fluorocarbon layer an outer layer of a thermoplastic polymer. Fluoropolymer layers have excellent chemical resistance.

#### 5501733

## RARE EARTH METAL SULFIDE PIGMENTS COMPRISING FLUORINE VALUES

Macaudiere Pierre; Morros Jorge; Tourre Jean-Michel; Tressaud Alain Asnieres/Seine, FRANCE assigned to Rhone-Poulenc Chimie

Fluoridated particulates, especially external face surface-fluoridated particulates of the rare earth metal sesquisulfide pigments/colorants, advantageously encapsulated within a coating layer of at least one transparent oxide or hydrate thereof, eg, silica, have improved chromatic properties and are well suited for the coloration/pigmentation of a wide variety of materials and substrates, for example paints, plastics, resins, varnishes, rubbers, ceramics, glazes, papers, inks, leathers, cosmetics, dyes, coatings, etc.