## CLAIMS

1. A solution for forming a fluoropolymer coating comprising:
   i) an organic solvent, and dissolved therein
   ii) a fluoropolymer consisting essentially of repeating units arising from the monomers tetrafluoroethylene, methyl vinyl ether and vinyltriisopropoxysilane or consisting essentially of repeating units arising from the monomers tetrafluoroethylene, ethyl vinyl ether and vinyltriisopropoxysilane.

2. The solution of claim 1, wherein said solvent is a ketone, glycol ether or halocarbon having a normal boiling point of at least 50°C.

3. The solution of claim 1, wherein said solvent is at least one of methyl isobutyl ketone, 2-heptanone and propylene glycol monomethyl ether acetate.

4. The solution of claim 1, wherein said solvent is propylene glycol monomethyl ether acetate.

5. The solution of claim 1, containing from 0.5 to 35 weight percent of said fluoropolymer.

6. The solution of claim 1, being substantially free of particles of size greater than 1 micrometers.

7. The solution of claim 1, having a phase stable shelf-life such that it remains a liquid and does not gel at ambient temperature for a time period of at least 3 months.

8. The solution of claim 1, wherein said fluoropolymer has a weight average molecular weight of from 10,000 to 350,000 daltons, measured in hexafluoroisopropanol using SEC.

9. The solution of claim 1, wherein said fluoropolymer consists essentially of repeat units arising from tetrafluoroethylene, methyl vinyl ether, and vinyl triisopropoxysilane, said fluoropolymer has a weight average molecular weight of from 50,000 to 330,000 daltons,

said solvent is propylene glycol monomethyl ether acetate, and said solution contains from 15 to 25 weight percent of said fluoropolymer dissolved therein, wherein the weight average molecular weight is measured in hexafluoroisopropanol using SEC.

10. The solution of claim 1, wherein the solution additionally comprises photosensitizer and/or photoacid generator.

11. A process for forming a fluoropolymer coating on a substrate, comprising:

(I) applying a coating of a solution onto at least a portion of a substrate, wherein said solution comprises
i) an organic solvent, and dissolved therein
ii) a fluoropolymer consisting essentially of repeating units arising from the monomers tetrafluoroethylene, methyl vinyl ether and vinyltriisopropoxysilane or consisting essentially of repeating units arising from the monomers tetrafluoroethylene, ethyl vinyl ether and vinyltriisopropoxysi lane;
(II) removing at least a portion of said organic solvent from the coated solution, thereby forming said fluoropolymer coating.

12. The process of claim 11, further comprising (III) curing said fluoropolymer after said step (II) removing at least a portion of said organic solvent from the coated solution.

13. The process of claim 11, wherein said fluoropolymer coating has a thickness of from 0.025 to 100 micrometers or from 0.1 to 50 micrometers or from 0.025 to 0.1 micrometers.