

WHAT IS CLAIMED IS:

1. An article comprising:
 - a. an expanded fluoropolymer;
 - b. a vapor deposited hydrophilic coating on the expanded fluoropolymer, wherein the coating comprises a copolymer formed from the polymerization of at least one ~~non-wetting~~ hydrophilic monomer with at least one fluoromonomer to form the coating on the expanded fluoropolymer.
2. The article of claim 1, wherein the expanded fluoropolymer is expanded PTFE.
3. The article of claim 1, wherein the copolymer comprises fluoroacrylate.
4. The article of claim 1 wherein the copolymer comprises perfluoroacrylate.
5. The article of claim 1, wherein the copolymer comprises perfluoroalkyl-2-hydroxypropylmethacrylate.
- ~~6. The article of claim 1, wherein the non-wetting monomer comprises a hydrophilic monomer.~~
- ~~7~~6. The article of claim 1, wherein the article is hydrophilic.
- ~~8~~7. The article of claim 1, wherein the copolymer comprises a carboxylic group.
- ~~9~~8. The article of claim 1, wherein the copolymer comprises an acrylic acid copolymer.
- ~~10~~9. The article of claim 1, wherein the copolymer comprises a non wetting monomer having a surface energy of at least 5 dyne/cm greater than the expanded fluoropolymer.
- ~~11. The article of claim 1, wherein the coating is a conformable coating.~~
- ~~12~~10. The article of claim 3, wherein the hydrophilic monomer is copolymerized and cross-linked to a fluoroacrylate monomer.
- ~~13~~11. The article of claim ~~4~~210, wherein the hydrophilic monomer is cross-linked to the fluoromonomer with a multifunctional acrylate.
- ~~14~~12. The article of claim 1, wherein the copolymer comprises a hydroxyl group.
- ~~15~~13. The article of claim 1, wherein the copolymer comprises an amino group.

- ~~16~~14. The article of claim 1, wherein the copolymer comprises a phosphonic group.
- ~~17~~15. The article of claim 1, wherein the copolymer comprises a sulfonic group.
- ~~18~~16. The article of claim 1 having a ~~BET~~ surface area greater than 10m²/g.
- ~~19~~17. The article of claim 1, wherein the expanded fluoropolymer is a sheet having a first surface and a second surface.
- ~~20~~18. The article of claim ~~19~~17, wherein the sheet has a thickness greater than 20um.
- ~~21~~19. The article of claim ~~20~~18 wherein the both the first and second surfaces are hydrophilic.
- ~~22~~20. The article of claim 1 in the form of a tube, rod, or fiber.
- ~~23~~21. An article comprising:
- a. an expanded fluoropolymer;
 - b. a vapor deposited coating on the expanded fluoropolymer, wherein the coating comprises a copolymer formed from the evaporation, condensation and subsequent polymerization of at least one non-wetting monomer with at least one fluoromonomer to form the coating on the expanded fluoropolymer, and
wherein the non-wetting monomer is cross-linked to the fluoromonomer.
- ~~24~~. ~~The article of claim 23 wherein the fluoromonomer and non-wetting monomer are evaporated and condensed simultaneously.~~
- ~~25~~. ~~The article of claim 23 wherein the article is hydrophilic.~~
- ~~26~~. ~~The article of claim 23 wherein non-wetting monomer is polymerized to the perfluoroacrylate monomer by exposure to a high energy source.~~
- ~~27~~. ~~The article of claim 26 wherein the high energy source comprises ultraviolet light.~~
- ~~28~~. ~~The article of claim 23 wherein a cross-linking monomer is evaporated and condensed onto the expanded fluoropolymer.~~
- ~~29~~. ~~The article of claim 23 wherein the non-wetting monomer is cross-linked to the fluoromonomer.~~
- ~~30~~22. The article of claim ~~23~~21 wherein a cross-linking monomer, fluoromonomer and non-wetting monomer are evaporated and condensed simultaneously.

- ~~31~~23. The article of claim ~~30~~22 wherein the cross-linking monomer is a multifunctional acrylate.
- ~~32~~. The article of claim ~~23~~ wherein the coating is a conformable coating.
- ~~32~~24. The article of claim ~~23~~21 in the form of a tube, rod, or fiber.
- ~~33~~25. The article of claim ~~23~~21, wherein the copolymer comprises a hydroxyl group.
- ~~34~~26. The article of claim ~~23~~21, wherein the copolymer comprises an amino group.
- ~~35~~27. The article of claim ~~23~~21, wherein the copolymer comprises a phosphonic group.
- ~~36~~28. The article of claim ~~23~~21, wherein the copolymer comprises a sulfonic group.
- ~~37~~29. The article of claim ~~23~~21, wherein the copolymer comprises a carboxylic group.
- ~~38~~30. The article of claim ~~23~~21, wherein the copolymer comprises an acrylic acid co-polymer.