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DeSimone et al.

[54] **NONAQUEOUS POLYMERIZATION OF FLUOROMONOMERS**

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[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

[63] Continuation of application No. 08/531,619, Sep. 21, 1995, Pat. No. 5,674,957, which is a continuation-in-part of application No. 08/402,202, Mar. 10, 1995, abandoned.

[51] **Int. Cl.**^{6} **C08F 2/00**

[52] **U.S. Cl.** **526/89**; 526/255; 526/942

[58] **Field of Search** 526/89, 255, 942

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[57] **ABSTRACT**

The present invention provides a process for making fluorinated polymers and copolymers having stable end groups. The process includes (1) contacting a fluoromonomer, an initiator capable of producing stable end groups on the polymer chain, and a polymerization medium comprising carbon dioxide, and (2) polymerizing the fluoromonomer. The polymerization medium preferably comprises liquid or supercritical carbon dioxide. Advantageously, the process may also include the step of separating the fluoropolymer from the polymerization medium. The present invention also provides polymerization reaction mixtures useful in the processes of the present invention.

25 Claims, No Drawings