

**United States Patent** [19]

Sato et al.

[11] **Patent Number:** 5,665,846[45] **Date of Patent:** Sep. 9, 1997[54] **FLUORINATED AMIDE COMPOUNDS AND CURABLE COMPOSITIONS**[75] **Inventors:** Shinichi Sato; Noriyuki Koike; Takashi Matsuda; Yasushi Yamamoto, all of Usui-gun, Japan[73] **Assignee:** Shin-Etsu Chemical Co., Ltd., Tokyo, Japan[21] **Appl. No.:** 590,318[22] **Filed:** Jan. 23, 1996[30] **Foreign Application Priority Data**Jan. 23, 1995 [JP] Japan ..... 7-027296  
Jan. 23, 1995 [JP] Japan ..... 7-027297[51] **Int. Cl.<sup>6</sup>** ..... C08L 77/04[52] **U.S. Cl.** ..... 528/15; 528/31; 528/42; 528/26; 528/28; 556/419[58] **Field of Search** ..... 528/15, 31, 42, 528/26, 28; 556/419[56] **References Cited**

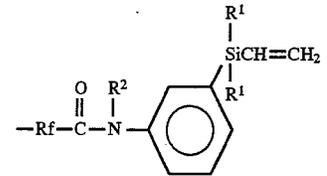
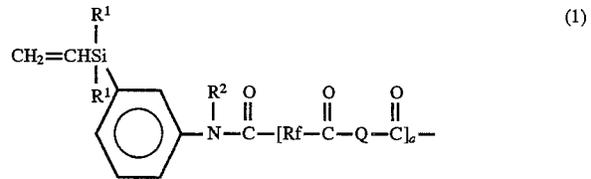
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573282 6/1993 European Pat. Off. .*Primary Examiner*—Ralph H. Dean  
*Attorney, Agent, or Firm*—Millen, White, Zelano & Branigan, P.C.[57] **ABSTRACT**

Novel fluorinated amide compounds are of formula (1):

wherein R<sup>1</sup> is a monovalent hydrocarbon group; R<sup>2</sup> is a hydrogen atom or a monovalent hydrocarbon group; Q is a group represented by formula (2) or (3):wherein R<sup>3</sup> is a divalent hydrocarbon group which may have at least one intervening atom selected from oxygen, nitrogen and silicon atoms, R<sup>4</sup> and R<sup>5</sup> are divalent hydrocarbon groups; Rf is a divalent perfluoroalkylene or perfluoropolyether group; and a is an integer inclusive of 0. A curable composition comprising (A) a fluorinated amide compound of formula (1), (B) a fluorinated organohydrogensiloxane containing at least one monovalent perfluoroalkyl or perfluoroalkyl or divalent perfluoroalkylene or perfluoroalkylene group and at least two hydrosilyl groups, and (C) a platinum group compound cures into elastomers having improved solvent and chemical resistance.**15 Claims, 3 Drawing Sheets**