United States Patent [19]

Micale

[11] **Patent Number: 4,665,107**

[45] **Date of Patent: May 12, 1987**

[54] **PIGMENT ENCAPSULATED LATEX AQUEOUS COLORANT DISPERSIONS**

[75] Inventor: **Fortunato J. Micale**, Bethlehem, Pa.

[73] Assignee: **Koh-I-Noor Rapidograph, Inc.**, Bloomsbury, N.J.

[21] Appl. No.: **842,609**

[22] Filed: **Mar. 21, 1986**

[51] **Int. Cl.**[4] **C09B 67/00**; C09D 5/00; C08K 9/00; C08J 3/02

[52] **U.S. Cl.** **523/105**; 523/161; 523/205; 523/211; 523/335; 523/340; 8/527

[58] **Field of Search** 523/105, 205, 211, 335, 523/340; 8/527

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,330,460	5/1982	Hoffend et al.	523/205
4,339,337	7/1982	Tricot et al.	524/431
4,407,985	10/1983	Muller	523/161
4,421,660	12/1983	Hajna	523/202
4,471,079	9/1984	Enami	523/161
4,525,525	6/1985	Hofer et al.	524/804
4,530,961	7/1985	Nguyen et al.	523/161
4,532,276	7/1985	Knable et al.	523/161
4,608,401	8/1986	Martin	523/205

Primary Examiner—Herbert J. Lilling

Attorney, Agent, or Firm—David H. Semmes; Warren E. Olsen

[57] **ABSTRACT**

A process for modifying colorants which comprise an active ingredient of solid primary particles in the submicron range by an encapsulation with polymer starting materials that are not substantially altered during the process. Writing fluids, textile colorants and cosmetic inks are disclosed wherein the intrinsic physical qualities of a solid active material are modified to create a stable aqueous dispersion with performance and rheology characteristic of the polymer, and not of the active ingredient.

34 Claims, No Drawings