

[54] PROCESS FOR DISPERSING POLYMER GEL PARTICLES IN AQUEOUS MEDIUM

[75] Inventors: David Farrar, West Yorkshire; John Robinson, Yorkshire; Peter Flesher, West Yorkshire, all of England

[73] Assignee: Allied Colloids Limited, West Yorkshire, England

[21] Appl. No.: 749,294

[22] Filed: Jun. 27, 1985

[30] Foreign Application Priority Data

Jun. 28, 1984 [GB] United Kingdom 8416454

[51] Int. Cl.⁴ C08F 6/24; C08L 1/26; B01F 17/52

[52] U.S. Cl. 524/35; 524/44; 524/45; 524/46; 524/47; 524/555; 524/556; 524/612; 524/916; 528/499; 528/502; 210/698; 210/701; 252/315.3; 252/315.4

[58] Field of Search 528/491, 499, 502; 524/580, 777, 916, 555, 556, 612, 35, 44-47; 210/701, 698; 252/315.3, 315.4

[56] References Cited

U.S. PATENT DOCUMENTS

3,755,280	8/1973	Saunders	210/734 X
3,876,573	4/1975	Engelhardt et al.	210/734 X
3,960,584	6/1976	Savage	210/734 X
3,976,611	8/1976	Aloia	524/777 X
3,985,651	10/1976	Newman	210/734
4,380,600	4/1983	Hosoda et al.	524/458
4,487,866	12/1984	Almond et al.	524/42
4,517,098	5/1985	Hann et al.	210/701
4,525,515	6/1985	Peignier	524/378
4,559,156	12/1985	Greaves et al.	210/701 X

Primary Examiner—Joseph L. Schofer

Assistant Examiner—F. M. Teskin

Attorney, Agent, or Firm—Jenner & Block

[57] ABSTRACT

A water soluble or swellable polymer gel is dispersed into a liquid phase to form a fluid composition and is worked while in that composition. The liquid phase is an aqueous solution of an equilibrating agent that substantially prevents aggregation of the particles or dissolution of the polymer during the working. The working may be, for instance, milling, extraction of impurities, extraction of water, transportation or chemical modification. Preferred equilibrating agents are sodium polyacrylate and polydiallyl dimethyl ammonium chloride.

21 Claims, No Drawings