

- [54] **PROCESS FOR PREPARING  
MICROPOROUS STRUCTURED SOLUBLE  
COFFEE PRODUCT**
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426/385; 426/386; 426/387; 426/388; 62/64**
- [58] Field of Search ..... **34/5; 62/64, 66, 75;  
426/594, 385, 386, 387, 388**

[56] **References Cited**  
**U.S. PATENT DOCUMENTS**

4,073,158 2/1978 Guiller ..... 62/64 X

4,077,227 3/1978 Larson ..... 62/74

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[57] **ABSTRACT**

A freeze-dried soluble coffee product in the form of particles or granules and having a microporous structure is prepared by prechilling a metal plate in a liquid refrigerant, immersing the plate in aqueous extract of coffee solids, reimmersing the plate in a liquid refrigerant, removing the frozen particles in the form of flakes from the plate, grinding and freeze-drying the flakes to produce frozen extract particles with reduced entrainment losses. The product so prepared has a unique porosity and is capable of sorbing, retaining and releasing volatile aromatic compounds.

**6 Claims, No Drawings**