

# United States Patent [19]

Cale et al.

[11] Patent Number: **4,900,575**

[45] Date of Patent: **Feb. 13, 1990**

[54] **AROMA RECOVERY FROM THE THERMAL HYDROLYSIS OF SPENT GROUNDS**

[75] Inventors: **Kenneth W. Cale**, Marlboro, N.J.;  
**Naoto Imura**, Yokkaichi, Japan;  
**George A. Jasovsky**, Bayonne, N.J.;  
**Saul N. Katz**, Monsey, N.Y.

[73] Assignee: **General Foods Corporation**, White Plains, N.Y.

[21] Appl. No.: **339,290**

[22] Filed: **Apr. 17, 1989**

[51] Int. Cl.<sup>4</sup> ..... **A23F 5/16; A23F 5/48**

[52] U.S. Cl. .... **426/387; 426/594; 426/650; 426/386; 426/422; 426/532**

[58] Field of Search ..... **426/594, 650, 386, 387, 426/422, 432**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

4,508,745 2/1985 Fulger et al. .... 426/594  
4,544,567 10/1985 Gottesman ..... 426/594  
4,571,339 2/1986 Katz et al. .... 426/594 X  
4,794,010 12/1988 Jones et al. .... 426/594 X  
4,798,730 1/1989 Scoville et al. .... 426/432

*Primary Examiner*—Joseph Golian  
*Attorney, Agent, or Firm*—Thomas A. Marcoux;  
Thomas R. Savoie; Daniel J. Donovan

[57] **ABSTRACT**

The present invention relates to a process to recover beneficial coffee volatiles such as diacetyl and acetaldehyde from an aroma stream generated by the thermal hydrolysis of spent grounds. The aroma stream is passed over a bed of a non-polar microporous adsorbent and effluent is collected until breakthrough of furfural is detected. The invention also relates to the composition of the recovered/purified coffee aroma and to soluble coffee products containing the coffee aroma.

**12 Claims, No Drawings**