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- [54] **PROCESS FOR DECAFFINATING GREEN COFFEE BEANS**
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- [52] U.S. Cl. **426/427; 426/428; 426/447; 426/595**
- [58] Field of Search 426/447, 427, 428, 595

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[57] ABSTRACT

A simple, reliable process for decaffeinating green coffee beans to a high degree while avoiding denaturation of the green coffee beans includes wetting the green coffee beans to a high water content of 35-50%-wt.; compressing the beans in a pressure chamber for a period of a few minutes to several hours in an atmosphere comprised of a supercritical fluid which is a gas at STP, at a temperature ranging from 20° to 80° C. under a critical pressure ranging from 75 to 300 bar; decompressing the wetted beans from critical pressure p_c to a pressure p for which $p_c \leq p \leq 1$ bar abruptly or in the space of a few minutes, while avoiding freezing the green coffee beans; washing with water or with the supercritical fluid for selective extraction of the caffeine; repeating the process one or more times; centrifuging; drying; and roasting the beans. Further, caffeine is recovered in a known manner from the washing medium.

15 Claims, 2 Drawing Sheets