

[54] CONTINUOUS DESORPTION APPARATUS FOR AROMA FLAVOR CONCENTRATE

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Related U.S. Application Data

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[58] Field of Search ..... 99/286, 293, 289 R, 99/279, 300, 483, 484, 485, 496; 426/594, 595, 596, 597, 386

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[57] ABSTRACT

This invention relates to a process and apparatus for the production of an aroma flavor concentrate from aroma- and flavor-bearing substrates, especially roasted and ground coffee. More particularly, the invention is concerned with a process for continuously de-aromatizing and desorbing aroma and flavor constituents from said substrates by passing wet steam counter-currently through a continuous columnar bed of said substrate, said bed flowing upwardly through a substantially upright vacuum-tight desorption column. Wet steam is applied in an amount and manner to form and maintain a substantially stationary desorption zone in said flowing columnar bed at a finite distance above a bottom inlet of said upright desorption column. The stationary desorption zone is formed by the condensation of the wet steam as it passes into a progressively cooler temperature gradient in said flowing columnar bed. The temperature gradient is created by the continuous introduction of chilled fresh substrate through the bottom inlet. A vaporous aroma flavor fraction and a desorbed soluble solids fraction are collected in separate cold traps in communication with said column at about said stationary desorption zone.

5 Claims, 3 Drawing Figures

