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3,544,331

SEPARATE GRINDING OF VARIOUS COFFEE TYPES TO CONTROL FLAVOR CONTRIBUTION

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No Drawing. Filed Mar. 4, 1968, Ser. No. 709,872

Int. Cl. A23f 1/00

U.S. Cl. 99—68

3 Claims

ABSTRACT OF THE DISCLOSURE

A process for obtaining a roast and ground coffee product comprising (1) separately grinding to a fine particle size roast coffee beans that provide a taste contribution to a roast and ground coffee product that it is desired to increase, (2) separately grinding to a coarse particle size roast coffee beans that provide a taste contribution to a roast and ground coffee product that it is desired to decrease, and (3) mixing the resulting roast and ground coffee fractions to obtain a novel roast and ground coffee product.

BACKGROUND OF THE INVENTION

The field of this invention is roast and ground coffee. One object in processing any food product is to bring out the best flavor possible with the raw materials used, and such a flavor objective is the primary consideration in processes involved in the preparation of roast and ground coffee product.

Roast and ground coffee products may be formed from a single variety of coffee beans, but such roast and ground coffee products do not generally give a coffee brew with a taste that most consumers find desirable. The roast and ground coffee products that the majority of coffee drinkers find give an acceptable and desirable tasting coffee brew consist of blends formed from a variety of coffee beans. In forming what are considered to be the most acceptable roast and ground coffee products, therefore, coffee beans of different growth areas, botanical origin, and quality are generally blended together.

There are three major types of coffee beans which can be blended to form a roast and ground coffee product. There are Brazilians and milds, which botanically are Arabicas, and Robustas. Coffee brews prepared from the Brazilian beans are relatively non-aromatic and neutral-flavored in the cup while the high grown mild coffees are very fragrant and acidic, often with heavy body in the cup. Robustas have strong distinctive flavors characteristic; they are bitter and contain varying degrees of a rubbery flavor note.

Although there are three major coffee taste types (Brazilians, milds, and Robustas), each of these various types of coffee beans will yield different taste properties depending on the soil and weather conditions in the growth area, curing methods, and other factors. According to their growth conditions and their preparation for market, some of the coffee beans will have flavor characteristics noted for strength, some for rich flavor or "body," and others for acidity and aroma.

Most roast and ground coffee products are prepared from blends of coffee beans containing each of the above-mentioned three major coffee tests types. Since neutral-tasting Brazilian coffee beans are generally the lowest priced acceptable coffees in large supply, they make a good base for blending flavor, and large amounts of these coffees are often used in blends to control the cost of the roast and ground product. Robustas, with their strong distinctive flavor characteristics, are traditionally the lowest priced coffee beans, and their content in a

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blend can strongly influence both the cost and taste of a coffee blend. While many coffee blends utilize at least some Robustas to contribute desirable flavor notes, the level of Robusta usage generally must be very limited because of the Robusta's exceptionally strong characteristic flavor. Variations in the level of usage of Brazilians and milds in a blend, however, can be made with relatively greater freedom without disturbing the taste of the roast and ground coffee product.

Typically, established coffee processors have formulated a roast and ground coffee blend which gives a flavorful coffee brew that satisfies consumers' taste. These consumers, however, can be retained and satisfied only by consistently forming a roast and ground coffee blend which gives coffee brews that consistently present the particular taste quality that consumers find desirable.

Maintaining this product flavor uniformity in a roast and ground coffee product, however, can be a difficult task because it is virtually impossible to form consistently identical blends of roast and ground coffee. This is so for several reasons. First, the quality of various varieties of coffee beans useful in preparing a roast and ground coffee blend can vary considerably. Secondly, the price of one or more coffee bean varieties useful in preparing the roast and ground coffee blend can change such that it can be desirable to either increase or decrease the level at which particular coffee bean varieties are employed in the blend. Thirdly, the availability of one or more coffee bean varieties useful in preparing the roast and ground coffee can be limited, even though the price and quality of the beans involved are satisfactory.

A notable problem in roast and ground coffee processing, therefore, is to consistently produce a roast and ground coffee product which will consistently give an acceptably uniform brew taste even if the composition of the roast and ground coffee blend must change from time to time.

In spite of the above-mentioned difficulties, roast and ground coffee products can usually be prepared which give coffee brews that generally present, within acceptable limits, the typical taste quality with which a particular roast and ground coffee is associated. This result is accomplished by skillful coffee processing, e.g., roasting green coffee beans to a degree such that particular taste qualities are developed, and skillful blending of coffee beans.

Generally roast and ground coffee products are formed, as is taught in the prior art, by (1) blending together various types of green coffee beans, (2) roasting the blend of green coffee beans, and (3) grinding the resulting blend of roast beans. One variation of this process taught in the prior art is to roast various types of green coffee beans separately, then blend the roast coffee beans together, and grind the resulting blend of roast coffee beans to form a roast and ground coffee product. (See, Sivetz and Foote, Coffee Processing Technology, vol. 1, page 173, The Avi Publishing Co., 1963.)

It would be desirable to be able to formulate blends of roast and ground coffees with greater latitude than that permitted by prior art processes without changing the taste characteristics of coffee brews prepared therefrom.

SUMMARY OF THE INVENTION

This invention relates to a novel process whereby substitutions of coffee beans which present different taste characteristics can be made with greater freedom in a roast and ground coffee product comprising a blend of coffee beans without affecting the taste characteristics of the coffee brew prepared therefrom; the invention also presents novel products based on this concept.