

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MALATHY NAIR, JAMES W. GEOFFRION,
and MARK A. KOOYMAN

Appeal No. 2001-0901
Application No. 08/937,297

ON BRIEF

Before GARRIS, WALTZ and TIMM, *Administrative Patent Judges*.
GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's refusal to allow claims 1-9 and 13-14¹. Claims 10-12 and 15-30 have been canceled.

¹Before any allowance of this application, the specification should be amended to provide explicit antecedent basis for the claim temperature range of “about 2 to 15°C” set out in original claim 2. The specification appears to only provide antecedent basis for “temperatures of 0 to 10° C, preferably 2 to 7° C” (i.e., at page 9 lines 26-27). See 37 CFR §1.75(d)(1) and Manual of Patent Examining Procedure (MPEP) § 608.01(o)(8th ed. Aug. 2001).

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BACKGROUND

The subject matter on appeal relates to a food colorant blend. The blend comprises a first food colorant which is an aqueous solution of water soluble annatto with a pH of about 12.5 to 13.5 and a total solids content of about 14-18%, and a second food colorant which is an aqueous caramel solution with a pH of about 6.5 to 6.9, a solids content of about 35 to 55%, and an ammonium content of less than 0.05%. These two colorants are combined such that the weight ratio of the first colorant (i.e., annatto) to the second colorant (i.e., caramel) ranges from 1:1 to 4:1, and the blend has a pH from about 9.1 to 10. Appellants teach that it is essential that the blended product have a pH of about 9.1 to 10 (see specification, page 8, lines 20-22 and brief, page 3) in order to overcome problems experienced with previous attempts to use an annatto- caramel colorant (see specification, pages 3-5 and brief page 4).

Claim 1 is representative of the subject matter on appeal and is reproduced below:

1. A food colorant blend comprising:

- A. a first colorant comprising an aqueous solution of water soluble annatto having a pH ranging from about 12.5 to 13.5 and a total solids content of about 14 to 18%,
- B. a second colorant comprising an aqueous caramel solution having a solids content of about 35 to 55%, a pH of about 6.5 to 6.9, and an ammonia content of less than 0.05%,

wherein the weight ratio to first colorant to second colorant ranges from about one part of first colorant to one part second colorant to about four parts first colorant to second colorant (1-4:1), and

wherein the annatto-caramel colorant blend has a pH of from about 9.1 to 10.

The prior art of record relied upon by the Examiner as evidence of obviousness are:

Kocher	2,831,775	Apr. 22, 1958
Rikon et al.	4,335,153	Jun. 15, 1982
Clark et al.	4,416,700	Nov. 22, 1983
Wullschleger et al. (Wullschleger)	5,223,298	Jun. 29, 1993

Applicants' admission of prior art as stated on page 7, lines 13-26, of the specification (AAPA)

Claims 1-9 and 13-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Clark in view of either AAPA or Kocher, and further in view of Wullschleger or Rikon.

We refer to the brief, the reply brief, and to the answer for a complete exposition of the opposing viewpoints expressed by the Appellants and by the Examiner concerning the above noted rejection.

OPINION

We appreciate the thoroughness with which the Examiner has reviewed and considered these claims. However, for the reasons set forth below, this § 103 rejection cannot be sustained.

The appealed claim 1 calls for a blend of two food colorants, annatto and caramel. AAPA establishes that an annatto colorant with the pH range and solids content range as claimed was known. Clark discloses that a caramel colorant with a pH of "about 7" was known (the Examiner's position being that a pH of "about 7" satisfies the claimed pH requirement of "about 6.5 to 6.9"), although Clark is silent as to any numerical values for the solids content of his caramel solution. The Examiner

sets out on page 5 of the answer that blending two known colorants to make a third color hue would have been *prima facie* obvious; and that optimizing the amounts/ratio of colorants to define a desired hue would have been *prima facie* obvious optimization of a known result effective variable (that is, the amounts/ratio of the two colorants is a known result effective variable for obtaining a desired color hue). This may be true, however, we do not agree with the Examiner's position that optimizing the amounts/ratio of colorants to obtain the here claimed pH range, or to adjust the pH of the resulting blend to the Appellants' claimed essential pH range, would have been a *prima facie* obvious optimization of a known result effective variable.

The Examiner's position on this point is summarized on page 23 of the answer as follows:

Again, it is important to note that the product in the reference combination contains two colorants each of which have initial pH values within the ranges recited. The pH of the colorant blend is therefore inherently dependent upon the amounts/weight ratio of the colorants. Therefore blending the two components, solely for the purpose of achieving the desired final hue, would also inherently adjust the pH of the final blend. The amounts/weight ratio of the colorants is a result effective variable . . . as discussed above. Therefore the pH of the final colorant blend is also a result effective variable, dependent upon the amounts/weight ratio of the colorants and the desired final color of the end product, absent a showing of unexpected results.

We believe that this reasoning is deficient. The final end product colorant blend pH will depend on the relative amounts of each colorant used, since as here claimed each colorant has a specified, non-overlapping pH range. But this does not lead to the conclusion that the pH is a known result effective variable when combining two colorants. What desired result is the pH effecting? We do not see any

evidence in this record to support the Examiner's position that the pH is a known result effective variable in this situation. There is simply no teaching or suggestion in the evidence of record to adjust the pH of a colorant blend, or to achieve a particular pH range as here claimed.

Alternately, it appears the Examiner is stating the claimed pH will be an inherent result of blending these two colorants. However, "[i]nherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient." See *In re Oelrich*, 666 F. 2d 578, 581, 212 USPQ 323, 326 (CCPA 1981), quoting *Hansgig v. Kemmer*, 102 F. 2d 212, 214, 40 USPQ 665, 667 (CCPA 1939). Further, a retrospective view of inherency is not a substitute for some teaching or suggestion which supports the selection and use of the various elements in a particular claimed combination. See *In re Newell*, 891 F.2d 899, 901, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989)

As the Appellants stress in their reply brief (see page 2), specific steps are taken to actually treat the blend to assure the essential pH range is achieved. This is taught in the specification at page 12, lines 23-30:

When admixed in the weight ratios described above, the resultant blend will have a pH value ranging from about 9 to 10, depending in part upon the particular ratios of alkaline annatto to "neutral" caramel colorant employed.

The blend is then treated as described above with either KOH or a strong mineral acid to adjust the pH of the annatto-caramel colorant blend to desired values within the essential pH range of 9.1 to 10.0.

In light of the aforementioned quotation, it is clear that while the blend *may* have a pH within the claimed range, it also *may not* have such a pH (and will then need to be treated). Thus, it cannot be said that the claimed pH range will inherently result (i.e., always result) upon blending the two claimed colorants together. *See Oelrich*, 666 F.2d at 581, 212 USPQ at 326.

For the reasons set forth above, we agree with the Appellants that there is no appreciation in the art of record that pH of the colorant blend is a known result effective variable when combining two colorants to make a colorant blend. It is also clear that the claimed pH range will not inherently occur (i.e., always occur) upon blending these two colorants. Under these circumstances, we cannot accept the Examiner's position that it would have been *prima facie* obvious optimization of a known result effective variable to obtain the resulting pH range claimed herein of the colorant blend.

In light of the foregoing, we cannot sustain the Examiner's § 103 rejection of the appealed claims.

OTHER ISSUES

A continuation application, Serial No. 09/697,172, of this application was allowed on February 1, 2002 and appears to contain claims drawn to subject matter at least similar to the combination set forth in claim 9 herein. The Examiner and the Appellants should review those claims and consider whether an obviousness type double patenting rejection should be made.

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