

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 38

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAOLO A. VERONESI
and ANNA M. VERONESI

Appeal No. 1997-4344
Application 08/380,218

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and ADAMS, Administrative Patent Judges.

WILLIAM F. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision in an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 13, all the claims pending in the application. Claims 1 and 11 are representative of the subject matter on appeal and read as follows:

1. A programmed-release ambroxol-HCl pharmaceutical dosage form, comprising a plurality of inert core microgranules of a variety of particle sizes ranging from 0.3 to 1.2 mm, said inert core microgranules being coated with multiple alternating

microlayers of (1) micronized ambroxol hydrochloride active agent and (2) delayed-release film material, said coated microgranules including an external microlayer of delayed-release film material, and said coated microgranules having particle sizes ranging from 0.6 to 1.5 mm.

11. A process for the production of the programmed-release dosage form as defined by Claim 1, comprising (a) providing a plurality of inert core microgranules of a variety of particle sizes ranging from 0.3 to 1.2 mm, (b) providing a therapeutically effective amount of micronized ambroxol hydrochloride, (c) applying on said inert core microgranules multiple alternating microlayers of said micronized ambroxol hydrochloride and of a solvent solution of a delayed-release film-coating material wherein said delayed-release film-coating material is external to said micronized ambroxol hydrochloride, and (4) consolidating each microlayer to dryness.

The reference relied on by the examiner is:

Ghebre-Sellassie et al. (Ghebre-Sellassie) 5,084,287 Jan. 28, 1992

Claims 1 through 13 stand rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the examiner relies upon Ghebre-Sellassie. We reverse.

DISCUSSION

Claim 1 is directed to a programmed-release ambroxol-HCl pharmaceutical dosage form. The dosage form comprises a plurality of inert core microgranules having a variety of particle sizes ranging from 0.3 to 1.2 mm. Importantly, the core microgranules are coated with multiple alternating microlayers of (1) micronized ambroxol hydrochloride

active agent and (2) delayed-release film material. As seen from claim 1, the coated microgranules are to have a specified final particle size.

As explained at page 4, lines 1-11 of the specification:

Thus produced is a programmed-release ambroxol-HCl pharmaceutical dosage form, comprising a plurality of inert core microgranules of a variety of particle sizes ranging from 0.3 to 1.2 mm, such inert core microgranules being coated with alternating microlayers of (1) micronized ambroxol hydrochloride active agent and (2) delayed-release film material, such coated microgranules including an external microlayer of delayed-release film material, and such coated microgranules having particle sizes ranging from 0.6 to 1.5 mm.

Claim 11 on appeal is directed to the method for producing the claimed dosage form having the specified alternating microlayers.

Ghebre-Sellassie describes a pharmaceutical dosage form in which a drug is coated on a core material. While Ghebre-Sellassie does not appear to directly disclose or suggest the use of ambroxol-HCl as the active agent, appellants have not made this argument in support of patentability. Rather, appellants' position is that the pharmaceutical dosage form of Ghebre-Sellassie does not have multiple alternating microlayers of (1) micronized active agent and (2) delayed-release film material. In response, the examiner states at page 3 of the Examiner's Answer:

Applicant's [sic] main argument is that the reference does not disclose multiple alternating layers of drugs and delayed [sic] release film material. The Examiner agrees with the statement that the reference shows only one functional layer. This is the layer that is applied on top of the inert core which is layered with the micronized drug. Ghebre-Sellassie et al. disclose that the drug is layered onto the core using a binder such as polyvinylpyrrolidone. The term "layered" implies layers of the drug. The drug is able to be layered due to the presence of the binder (polyvinylpyrrolidone). If there were no binder between the drug layers, there could be no "layers" since one drug layer would not stick to the other drug layer. This is what the term "layering" means to one skilled in the art of manufacturing pharmaceutical dosage forms [sic].

We agree with appellants that Ghebre-Sellassie does not teach or suggest forming a pharmaceutical dosage form containing multiple alternating microlayers as required by the claims on appeal. The examiner's reading of the reference simply has no factual basis. Keeping in mind, Ghebre-Sellassie is the only evidence of obviousness relied upon by the examiner, it is not clear on what basis the examiner has concluded that "the term 'layered' implies layers of the drug" (emphasis added). We agree with the following statement at page 8 of the Appeal Brief:

Consequently, the Examiner's observations in the final Official Action does not reflect the specification or the claims of U.S. Patent No. 5,084,287, since Appellants could not find any reasonable reference in the patent to indicate that either the drug and polyvinylpyrrolidone or the only two types of layers are multiple and alternated many times as in the instant invention. On the contrary, the micropellets of Ghebre-

Sellassie et al are made of only two layers, one layer comprising the active ingredient + antiadherents + binders and one layer comprising a material that provides the necessary release characteristics.

The examiner also makes the assertion that the process of Ghebre-Sellassie and that of the present invention are “in fact the same.” (Examiner's Answer, page 3). We disagree. Example 1 of Ghebre-Sellassie states in relevant part that “the layering solution was sprayed on the fluidizing bed of lactose granules until the desired drug loading was achieved.” Example 1 of the present specification indicates that a similar process was used but that the amount of the active agent and delayed-release film material were “maintained under constant control.” When Example 1 of the present specification is read in the context of the remaining portions of the specification, e.g., page 4, lines 1-11, the “constant control” must include forming alternating microlayers of the active agent in the delayed-release film material. In other words, it appears that according to the present invention, the apparatus used in the process of Example 1 would be controlled so that a first layer of active agent is sprayed onto the inert granules followed by a first layer of the delayed-release film material with the spraying steps being alternated until a sufficient number of alternating microlayers of the two materials is achieved. No such control is found in Ghebre-Sellassie. If there is a “layering” taking place in Example 1 of Ghebre-Sellassie, it is that multiple layers of the same composition are applied to the inert

Appeal No. 1997-4344
Application 08/380,218

granules. The examiner has not pointed to and we do not find any teaching or suggestion in Ghebre-Sellassie that the coating process should be controlled in the manner required by the claims under appeal.

The decision of the examiner is reversed.

REVERSED

Sherman D. Winters)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
William F. Smith)	
Administrative Patent Judge)	APPEALS AND
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)	INTERFERENCES
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Appeal No. 1997-4344
Application 08/380,218

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