

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application 498,260, having been rejected under Rule 47(2) of the Patent Regulations, the Applicant has asked that the Final Action of the Examiner be reviewed. The rejection has consequently been considered by the Patent Appeal Board and by the Commissioner of Patents. The findings of the Board and the ruling of the Commissioner are as follows:

Agent for the Applicant

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This decision deals with the Applicant's request that the Commissioner of Patents review the Examiner's Final Action on patent application 498,260, class 134-5.2, filed December 20, 1985 and entitled "Encapsulated Halogen Bleaches and Methods of Preparation and Use". The inventor, Keith E. Olson, has assigned the application to Economics Laboratory Inc., St. Paul, Minnesota. The Examiner in charge issued a Final Action on August 6, 1991 refusing certain of the claims in view of prior art. The Applicant replied on February 5, 1992 with an argument in favour of the rejected claims, requesting that the Final Action be reviewed by the Commissioner of Patents.

The invention relates to encapsulated active halogen bleach compositions and a method for preparing them. The compositions provide improved stability of the encapsulated oxidising active halogen in alkaline environments such as occur in a detergent-bleach composition.

The Examiner rejected claims 1 to 6, 15 to 20 and 28 of the application in view of United States patent number 3,908,045 to Alterman, whilst stating that claims 7 to 14, 21 to 27, 29 and 30 were considered allowable. Independent claims 1 and 15, which are representative of the rejected claims, are as follows:

1. An encapsulate chlorine bleach composition that is chemically compatible with alkaline cleaning compositions and does not interfere with their action, the capsule having a particle size ranging from about 10 U.S. mesh to 60 U.S. mesh and consisting of a core and an encapsulating coating effective to isolate the core, wherein the core, which is a chlorine bleach compound, comprises about 20 to 90 wt-% of the capsule and the coating, which is an anionic synthetic detergent and which is a solid at normal storage temperatures, comprises about 10 to 80 wt-% of the capsule.

15. A process for forming an encapsulated chlorine bleach which consists of about 20 to 90 wt-% of a chlorine bleach compound core material and about 10 to 80 wt-% of an anionic synthetic detergent coating which is a solid at normal storage temperatures, each based on the capsule, the process comprising the steps of:

- (a) forming a fluidized bed of the active halogen core material, the core material comprising particles having a particle size of about 8 to 120 U.S. mesh; and

- (b) forming a coating of the anionic synthetic detergent, which is substantially inert with respect to the chlorine bleach core, on the particles in the bed; wherein the coating renders the chlorine bleach core stable in an alkaline environment.

The Alterman patent is directed to the encapsulation of particulate fabric bleaching agents, more specifically to chlorine releasing compounds to prevent pinholing on coloured fabrics whilst still providing good chlorine release. The process for depositing the encapsulating material involves applying a continuous coating to the particulate material whilst it is in a fluidized state. A preferred encapsulating material is a fatty acid having from 12 to 20 carbon atoms. Claims 1 to 6, 15 to 20 and 28 were therefore rejected as being obvious in view of the prior art.

The Board notes that the rejected claims all relate to bleach compositions consisting of capsules composed of granules of a bleaching agent coated with a single coating of an anionic synthetic detergent and processes for their preparation, whilst the allowable claims all relate to bleach compositions consisting of capsules composed of granules of a bleaching agent coated with (1) a first coating of an inorganic coating agent such as an alkali metal phosphate compound, sodium sulphate or mixtures thereof and (2) a second coating of an anionic synthetic detergent such as an n-alkyl sulfonate.

In its response to the Final Action the Applicant did not amend or delete the rejected claims but argued against the rejection itself; however subsequent to a phone conversation with the examiner the Applicant submitted a new set of claims, claims 1 to 21 for consideration, and on May 19, 1993 formally requested that the claims be inserted in the application in place of present claims 1 to 30. The Applicant stated in its amendment letter that the claims were similar in scope to claims 7 to 14, 21 to 27, 29 and 30 which the examiner had indicated were allowable in his Final Action of August 6, 1991.

Claims 1 and 13 on which the rest of the new claims are dependent are as follows:

1. An encapsulated chlorine bleach composition that is chemically compatible with alkaline cleaning compositions and does not interfere with their action, said encapsulated chlorine bleach composition comprising:

- (a) 30-wt-% to 80 wt-% of an active halogen bleach core;
- (b) 5 wt-% to 50 wt-% of an inorganic agent coated over said active halogen bleach core; and
- (c) 5 wt-% to 50 wt-% of an n-alkyl sulfate or sulfonate synthetic detergent coated over said inorganic agent.

13. An encapsulated chlorine bleach composition that is chemically compatible with alkaline cleaning compositions and does not interfere with their action, said encapsulated chlorine bleach composition comprising:

- (a) 30-60 wt-% active halogen bleach;
- (b) 15-45 wt-% inorganic agent; and
- (c) 10-35 wt-% n-alkyl sulfate or sulfonate.

The Board has considered the new claims and is satisfied that they avoid the objection made in the Final Action since they refer only to bleach compositions which consist of an active halogen bleach core covered by two separate and distinct coatings in contrast to the prior art compositions which consist of a halogen bleach core covered by a single fatty acid coating. The Board therefore recommends that new claims 1 to 21 be inserted in the application and that the application be returned to the examiner for further prosecution. The Board however notes that, though the new claims are clear of the cited prior art, they do require amendment before they can be considered allowable, for instance several of the claims do not comply with Rule 26.

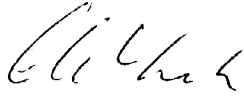


F.H. Adams
Chairman
Patent Appeal Board



M. Howarth
Member
Patent Appeal Board

I concur with the recommendation of the Patent Appeal Board. Accordingly I agree that claims 1 to 30 of the application be replaced by new claims 1 to 21 and that the application be returned to the examiner for further prosecution consistent with the recommendation.

A handwritten signature in cursive script, appearing to read 'M. Leesti'.

M. Leesti
Commissioner of Patents

Dated at Hull, Quebec
this 29th day of June, 1993