INTERNATIONAL SMELTING AND REFINING COMPANY
25 Broadway
New York

OFFICE OF THE VICE PRESIDENT

October 17, 1940

Mr. James F. Leist,
Dennie, Davis, Mervin & Edmonds,
165 Broadway,
New York City

Re: Johnson et al Application
Serial No. 178,312 for:
METHOD OF PRODUCING WHITE
LEAD

Dear Jim:

I am sending you herewith copy of letter from Mr. Johnson together with a memorandum by Mr. Knox, which is self-explanatory.

Yours very truly,

KS/
Enc.

PNYC00008434

INTERNATIONAL SMELTING AND REFINING COMPANY

East Chicago, Indiana

G. E. JOHNSON
Plant Manager

ANACONDA

PLANTS: East Chicago, Ind.
Akron, Ohio

October 15th, 1940

ACKNOWLEDGED RECEIPT
10-17-40

Mr. Frederick Laist, Vice-President,
International Smeltg. and Refg. Co.,
Room 1720 - 25 Broadway,
New York, N. Y.

Re: Johnson et al Application
Serial No. 178352
For: METHOD OF PRODUCING
WHITE LEAD

Dear Mr. Laist:-

et

To avoid undue delay, in the absence of Mr. Case I am replying to your letter of September 25th, with attached copy of a letter from Mr. James Laist on the above-mentioned subject.

We have carefully studied the suggestions given in Mr. James Laist's letter, and in reply to it we are attaching a memorandum by Mr. Knox, which we believe gives him the information desired for preparation of a suitable affidavit. We hope that this information is sufficient for the purposes desired, but, if not, we will appreciate any further suggestions.

Very truly yours,

G. E. Johnson

GEJ/s
encl.
cc-Mr.F.O.Case

PNYC00008435

N11211.01

INTERNATIONAL SMELTING AND REFINING CO.
EAST CHICAGO, INDIANA

MEMORANDUM

TO Mr. G. E. Johnson, Plant Manager DATE October 4th, 1940

SUBJECT: RE: JOHNSON ET AL APPLICATION
SERIAL NO. 178,352
FOR: METHOD OF PRODUCING
WHITE LEAD

In reference to Mr. James W. Laist's letter of September 24th requesting information for use in the preparing of an affidavit in connection with the above Patent Application:-

The procedures outlined in Examples 2 and 4 of the Johnson Patent No. 1,845,713 were not carried beyond the experimental development stage as it was found that while they represented a distinct improvement in controlling the composition of the precipitated White Lead, that in practice they would be uneconomical. Tests showed that in Example 2, acetate ions, and in the case of Example 4, sodium ions, would have to be added in amounts in excess of the normal losses of these compounds and that their concentration would therefore rise to a point where a portion of the solution would have to be discarded, in order to permit lowering the concentration by diluting the solution with water. The added cost of these chemicals would have made procedures 2 and 4 too costly. The disadvantages of the foregoing procedures were eliminated while still retaining their improved control, when the procedure of the present invention was discovered. This improved procedure eliminates all need for added chemicals, and hence the added cost that made the earlier process uneconomical. In practice, the operation procedure followed in applying the present invention is to subject only a portion of the catholyte to excessive carbonation and to use the remaining portion of uncarbonated catholyte, containing sodium hydroxide, to add to the anolyte to establish the anolyte bicarbonate in the desired proportion.

This practice is covered more concisely in Claim No. 11, especially when the wording inserted in brackets in the following portion of this claim is added to the wording of the claim:-

Line 13 .....controlling the composition of the precipitated White Lead by reference to the bicarbonate concentration in the anolyte and adjusting the bicarbonate concentration in the anolyte by subjecting (a portion of) the catholyte to excess carbonation and adding to the anolyte (the remaining portion of the) uncarbonated catholyte containing sodium hydroxide to establish in the anolyte bicarbonate in the desired proportion.

This improved procedure, that does not require the addition of chemicals, was an outstanding contribution to the cost of controlling the composition of the White Lead. It was not obvious to those skilled in the art as it was only recently discovered. The invention has results in the production of a superior product at a substantial reduction in cost as was set forth in the affidavit subscribed to on the twenty-first day of December, 1939.

Wm. J. Kunz

WJK/mm White Lead Plant Superintendent