

Chicago

Dispersion Lab

Chicago

December 5, 1955

C. E. Adams

SW Grinder for Lithopons

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DEC 1955  
ADJ. RES. DEPT.

Thank you for your report concerning the first attempts at grinding quench box lithopons in the SW Grinder (Hochberg type).

Since you ran your tests, we have done a great deal more work with the mill and have improved our technique to the point where you might want to consider further testing on your product.

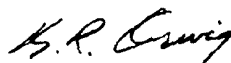
As you will recall, the lithopons slurry was quite badly discolored by the abrasion of steel from the impellers. We have made tests with fibre impellers and fibre spacers and have found we can produce titanium dispersions without any trace of discoloration. Previously, white enamels were discolored to about the same degree as your lithopons slurry.

In addition, we have been using 1/4" glass balls instead of sand, which grinds just as well and handles more easily. No traces of fine grinding media have been found in the product as was the case with Ottawa sand. We have also increased the speed of the impellers which seems to give better results as regards through put at a specified grind.

Our Patent Department has thoroughly examined the du Pont patent file history and has advised us that using glass balls of 1/4" or slightly larger puts us outside the Hochberg patent and no royalty need be paid. The du Pont patent as issued is very limited in its scope, as the Smevart attritor and other patents covered some of the original du Pont claims. These older patents have expired.

Our plans for a 12 inch grinder are progressing and we anticipate this pilot size mill will be ready for experimental work in January. If the pilot mill operates as well as the lab model, we intend to build production models and put them in the factories as needed. No royalty agreements will be signed with du Pont.

If you want to run additional tests in the lab model, we will be glad to assist you.



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