

FORECO, INC.

INTER-COMPANY AND INTER-DEPARTMENTAL CORRESPONDENCE

TO: Mr. P. A. Beane
F.I.L.

FROM: R. R. Dzurilla

DATE: November 8, 1972

SUBJECT: NEW PATENT CASE ON LIZARDITE
CONTAINING INSULATING
MATERIALS F.S. 775

Dear Mr. Beane:

Enclosed you will find the application form with the signatures you requested in your letter dated October 16, 1972 to Mr. E. J. Jago.

Also you will find a correspondence from Hedman Mines Limited answering our inquiry on the chemical composition of the "Hedman Fundamental Cationic Fibre" (HFCF).

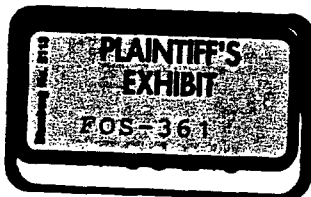
Summary of the Usage of Hedman Fundamental Cationic Fibre in PROFAX and PROFLEX

Laboratory tests and three successful production runs amounting to over 2,000 hot tops showed that Hedman Fundamental Cationic Fibre (HFCF) has at least two very important slurry properties which have only been found in paper and asbestos fibers. Suspension and dispersion are the two key properties which are attained with the usage of HFCF in high fiber recipes such as our PROFLEX line. Thus far, HFCF has been tried from 4% to 100% in water based slurries. The range from 4% to 20% in PROFAX and PROFLEX type slurries has definitely shown its compatibility with all ingredients in the various compositions of recipes which include:

- 1) Fillers --- silica flour, kyanite, mullite, alumina, olivine, magnesite, chrome magnesite, diatomite, calcium silicate and anthracite coal.
- 2) Fibers --- Alumina silicate, calcium silicate fiber glass and asbestos in amounts of less than 1%.
- 3) Binders --- Phenol formaldehyde (PF) and urea formaldehyde (UF).

High temperature resistance of HFCF amounting to greater than 1300°C is also an asset to the refractoriness of insulating hot tops. Amitec tests show it to be a good insulator and reports from the field have confirmed the recipe containing above average yield results. The formulation which is currently being produced and sold as a hot top insulator is E.P.-3267/PROFLEX.

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Approximate Composition of E.P.-5267/PROFLEX

Silica Flour	---	49%
Diatomite	---	25%
Alumina Silicate		
Fiber	---	10%
Binders	---	2%
WPCF	---	7%
Asbestos	---	1%
Fiber Glass	---	6%

A detailed disclosure will follow as soon as possible.

Sincerely Yours,

Robert R. Dzurilla

R. R. Dzurilla
Steel Mill Products Division

RRD/cel