

UNITED STATES PATENT OFFICE

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COLLECTOR RING BRUSH

No Drawing.

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This invention pertains to means for lubricating rubbing surfaces, particularly the brushes and collector rings of rotary converters, induction motors, turbo-generators, and the like.

Under certain conditions of service, particularly under certain weather conditions, the brushes are inclined to disintegrate or "dust", and the collector rings are inclined to cut.

The brushes are generally composed of a lubricant, such as graphite, combined with metal, the combination being usually effected by fusion, by impregnation, or simply by mixing.

The principal object of the invention is to greatly reduce dusting of the brushes and cutting of the rings by incorporating in the brushes a hygroscopic material, preferably a salt such as calcium chloride or any other suitable hygroscopic salt, whereby the brushes are enabled to absorb moisture from the atmosphere and thereby moisten and thereby aid in lubricating the surface with which they come in contact.

In practice the regular brushes may be replaced by brushes made according to the present invention, or the regular brushes may be left in place and sets of hygroscopic brushes may be placed in contact with the collector rings or commutators between the sets of regular brushes.

I claim:

1. A brush comprising graphite in combination with a hygroscopic salt.

2. A brush comprising graphite in combination with calcium chloride.

3. A brush comprising lubricating conducting material in combination with a hygroscopic salt.

4. A brush comprising lubricating conducting material in combination with calcium chloride.

5. An article of manufacture comprising a collector ring brush composed, at least in part, of hygroscopic salt.

6. An article of manufacture comprising a collector ring brush composed in part of calcium chloride.

In testimony whereof I hereto affix my signature.

FREDERICK P. FULLER.

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