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(54) Title: PROCESS OF PREPARING MINERAL MATERIAL WITH PARTICULAR CERIA-CONTAINING ZIRCONIUM OXIDE GRINDING BEADS, OBTAINED PRODUCTS AND THEIR USES

(57) Abstract: An object of the present invention is to provide a process to grind at least one mineral material in the presence of ceria (CeO₂)-containing zirconium oxide grinding beads having a specific ceria content (of between 14 and 20 % by weight relative to the total weight of said bead, preferably of between 15 and 18 %, and most preferably of approximately 16 %), and a specific average grain size (of less than 1 µm, preferably of less than 0.5 µm, and most preferably of less than 0.3 µm), wherein such beads are more resistant to wear than conventional beads of the prior art. An other object of the present invention lies in the ground material in the form of an aqueous suspension and in the form of a dry product. An other object of the present invention lies in the uses of such products in any sector making use of mineral materials, and notably in the paper, paint and plastic industries.



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