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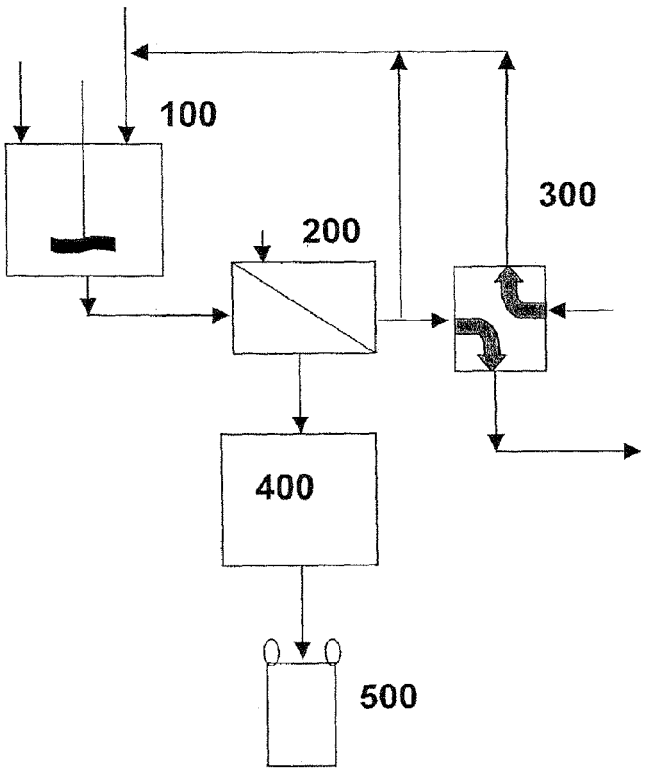
(54) Title: PURIFIED MOLYBDENUM TECHNICAL OXIDE FROM MOLYBDENITE

FIGURE 1



(57) Abstract: A process for converting molybdenum technical oxide, partially oxidized MoS_2 or off-spec products from MoS_2 oxidation processes into a purified molybdenum trioxide product is provided, generally comprising the steps of: combining molybdenum technical oxide with an oxidizing agent and a leaching agent in a reactor under suitable conditions to effectuate the oxidation of residual MoS_2, MoO_2 and other oxidizable molybdenum oxide species to MoO_3, as well as the leaching of any metal oxide impurities; precipitating the MoO_3 species in a suitable crystal form; filtering and drying the crystallized MoO_3 product; and recovering and recycling any solubilized molybdenum.

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