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(54) Title: APPARATUS AND METHOD FOR PURIFICATION OF CORROSIVE GAS STREAMS

(57) Abstract: A process, composition and apparatus for the removal of impurities from corrosive gases, particularly halogen-con-
taining gases, down to about 100 ppb concentration are described. The critical component is zirconia (ZrO₂), which in a variety of
physical forms is capable of dehydrating such gases. The zirconia can be in the form of a coating on a substrate, as a granular bulk
material, or deposited within the pores of a porous body. The zirconia is retained in a simple container which is easily installed in a
gas supply line, such as to a gas-or vapor-deposition manufacturing unit. The purification process can be operated for long periods
of time in the presence of these gases. The invention provides final purification to gas streams intended for gas-or vapor-deposition
formation of high purity electronic, prosthetic or similar products, and can be used in combination with a preliminary dehydration
process or a solid particulate removal unit upstream.



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