

Title (en)  
ANTI-STATIC APPARATUS

Title (de)  
ANTISTATISCHE VORRICHTUNG

Title (fr)  
APPAREIL ANTISTATIQUE

Publication  
**EP 4007094 A1 20220601 (EN)**

Application  
**EP 21207426 A 20211110**

Priority  
• GB 202018614 A 20201126  
• GB 202101888 A 20210211

Abstract (en)  
The present disclosure relates to an anti-static apparatus for neutralising an electrostatically charged surface, for example a moving web. The anti-static apparatus comprises at least one positive emitter and at least one negative emitter configured to generate an electric field. The anti-static apparatus also comprises a voltage supply unit for applying a positive voltage to the at least one positive emitter and a negative voltage to the at least one negative emitter. The voltage supply unit is configured to receive an input voltage and comprises a transformer configured to generate an output voltage having a greater voltage than the input voltage. The voltage supply unit also comprises a gas discharge tube connected to the voltage supply unit on a high voltage side of the transformer. The gas discharge tube comprises a breakover voltage configured to refer the voltage supply unit to ground when a voltage on the voltage supply unit exceeds a breakover voltage of the gas discharge tube.

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**H01T 19/04** (2013.01); **H01T 23/00** (2013.01); **H05F 3/04** (2013.01)

Citation (search report)  
• [A] JP 2012079714 A 20120419 - KEYENCE CO LTD  
• [A] JP H10144493 A 19980529 - KASUGA ELECTRIC CO  
• [A] US 2010073842 A1 20100325 - FUJIWARA NOBUHIRO [JP], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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