

Title (en)  
WEB CLEANING APPARATUS.

Title (de)  
VORRICHTUNG ZUR REINIGUNG VOR BEWEGTEN BAHNEN.

Title (fr)  
APPAREIL DE NETTOYAGE DE BANDES.

Publication  
**EP 0515414 B1 19940601**

Application  
**EP 91903320 A 19910211**

Priority  
• EP 9100283 W 19910211  
• GB 9003283 A 19900214

Abstract (en)  
[origin: WO9112095A1] In known non-contact web cleaners, clean air at high velocity is passed over the surface of the web to remove debris. However, these web cleaners can only remove particles down to a certain size due to the boundary layer produced over the surface of the web by the high velocity air stream. Electrostatic charges are also used to neutralise the charge which may be attracting the debris or dirt to the surface of the web. Electrostatic cleaning is only effective at low web speeds. Described herein is a method and apparatus which produces alternating electrostatic forces to separate particles from the surface of the web in the region of the boundary layer. The apparatus utilises an electrode (18) to produce a corona discharge in a gap (20) formed between the electrode (18) itself and the surface of the web (10) being treated. An air supply arrangement (22) is provided to supply air to and remove air from the gap (20) to remove the particles which have been lifted from the surface of the web (10) due to the corona discharge.

IPC 1-7  
**B08B 6/00**

IPC 8 full level  
**B08B 5/02** (2006.01); **B08B 6/00** (2006.01); **B65H 7/00** (2006.01); **B65H 23/00** (2006.01); **B65H 26/00** (2006.01)

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