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(54) **CARTRIDGE FOR A LIQUID-COOLED PLASMA ARC TORCH**

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(57) **ABSTRACT**

An electrode for a consumable cartridge of a plasma arc torch is provided. The electrode comprises a substantially hollow body defining a proximal end, a distal end and a longitudinal axis extending therebetween. The electrode also includes a plurality of flanges, including a proximal flange and a distal flange, disposed circumferentially about an external surface of the hollow body and extending radially outward. Each flange defines one or more holes configured to conduct a gas flow therethrough along the external surface of the hollow body. The one or more holes on the proximal flange define a first combined cross-sectional flow area that is different from a second combined cross-sectional flow area defined by the one or more holes on the distal flange.