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**United States Patent**

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*David J. Kappas*

*Director of the United States Patent and Trademark Office*

(12) **United States Patent**  
**Freakes**

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(54) **INSULATION DISPLACEMENT CONNECTOR**

(56)

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 (\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**

An insulation displacement connector having two deformable tangs forming a receiving pocket in which a wire may be placed, the deformable tangs adapted to be curled around the wire to create a secure connection that is resistant to disconnection by movement. Also disclosed is a method for creating the secure connection. A solenoid assembly that employs the disclosed insulation displacement connector that reduces the risk of a disconnection is also described. Also disclosed is a device that secures wires to the disclosed insulation displacement connector.

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*H01R 11/20* (2006.01)

(52) **U.S. Cl.** ..... 439/402; 439/404; 439/413

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 See application file for complete search history.

**6 Claims, 31 Drawing Sheets**

