

Title (en)  
Electrochemical pump protection.

Title (de)  
Elektrochemischer Schutz von Pumpen.

Title (fr)  
Protection électrochimique de pompes.

Publication  
**EP 0142219 A1 19850522 (EN)**

Application  
**EP 84305346 A 19840807**

Priority  
CA 436887 A 19830916

Abstract (en)  
A pump is provided herein for pumping a corrosive aqueous solution. The pump includes (i) a stainless steel or carbon steel casing; (ii) an inlet limb connected to the stainless steel or carbon steel casing; (iii) an outlet limb connected to the stainless steel or carbon steel casing; (iv) means electrically connecting the stainless steel or carbon steel casing to a source of negative or positive DC voltage, thereby to induce the stainless steel or carbon steel casing to act as an anode or as a cathode as required; (v) at least one reference electrode secured within at least one of the inlet limb and the outlet limb; (vi) at least one counter electrode secured within at least one of the inlet limb and the outlet limb; and (vii) control means for impressing a protection potential to the stainless steel or carbon steel casing at a predetermined voltage of -800 mVAg/AgC1 or more positive, the predetermined voltage being sufficient to draw the stainless steel or carbon steel casing into a zone of reduced corrosion. This structure protects the stainless steel or carbon steel casing of the pump from corrosion.

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CPC (source: EP)  
**C23F 13/005** (2013.01); **C23F 13/02** (2013.01)

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• [A] DD 42284 A  
• [A] DE 1253994 B 19671109 - KLEIN SCHANZLIN & BECKER AG

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