

Title (en)
SEALED SALT BRIDGE

Title (de)
ABGESCHLOSSENE SALZBRÜCKE

Title (fr)
COMPARTIMENT SCELLE REMPLI D'UN ELECTROLYTE

Publication
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Application
EP 00930493 A 20000509

Priority
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• US 36824399 A 19990804

Abstract (en)
[origin: WO0111349A1] The present invention is a sealed salt bridge (10) consisting of two connected, electrolyte-filled sections; an electrolyte conduit (14) that is relatively long and narrow, the distal end of which contacts a test solution (50) or another salt bridge and serves as a liquid junction (16); and the proximal end of which is connected to an electrolyte chamber (12) that is significantly wider than the electrolyte conduit, and contacts an electrode or second liquid junction (18). The conduit, by reason of its length and relatively small cross-section, serves to limit the rate that foreign ions from a test solution or another electrolyte compartment can diffuse from the liquid junction and contaminate the electrolyte chamber. The electrolyte chamber, by reason of its larger cross-section and concomitantly larger volume per unit length, serves to limit, by means of dilution, the concentration of foreign ions which eventually diffuse into the chamber.

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CPC (source: EP)
G01N 27/401 (2013.01)

Citation (search report)
• [X] US 5370783 A 19941206 - CARLSON WILLIAM P [US], et al
• [X] GB 1418233 A 19751217 - HARCO ELECTR LTD
• [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 307 (C - 1211) 13 June 1994 (1994-06-13) & DATABASE WPI Section Ch Week 199414, Derwent World Patents Index; Class D15, AN 1994-114529, XP002226698
• [X] PATENT ABSTRACTS OF JAPAN vol. 015, no. 019 (P - 1153) 16 January 1991 (1991-01-16)
• [X] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 08 30 June 1999 (1999-06-30)
• See references of WO 0111349A1

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