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(71) Applicant (for all designated States except US): BAYER
AKTIENGESELLSCHAFT [DE/DE]; 51368 Leverkusen
(DE).

(72) Inventors; and

(75) Inventors/Applicants (US only): PINTER, Hans-Dieter [DE/DE]; Forstring 20, 42929 Wermelskirchen (DE). BULAN, Andreas [DE/DE]; Alt Langenfeld 15, 40764 Langenfeld (DE). KLESPER, Walter [DE/DE]; Kalmüntener Strasse 103, 51467 Bergisch Gladbach (DE). GESTERMANN, Fritz [DE/DE]; Berliner Strasse 83, 51377 Leverkusen (DE).

(74) Joint Representative: BAYER AKTIENGESELLSCHAFT; 51368 Leverkusen (DE).

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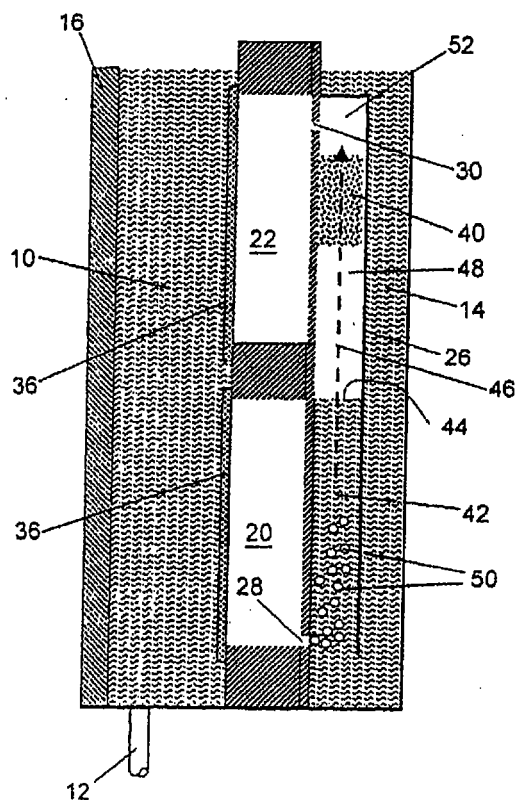
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(54) Title: ELECTROCHEMICAL HALF CELL

(54) Bezeichnung: ELEKTROCHEMISCHE HALBZELLE



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(57) Abstract: An electrochemical half cell, particularly suitable for the production of chlorine from an aqueous solution of an alkaline chloride, comprises an electrode chamber (10) for electrolyte. Several gas pockets (20, 22) for gas are also provided. A gas diffusion electrode (36) separates the gas pockets (20, 22) from the electrode chamber (10). A connecting channel (26) is also provided, by means of which the two gas pockets (20, 22) are connected to each other. Gas in the lower gas pocket (20) can flow into the connecting channel (26) through an outlet opening (28). Said gas climbs therein in the direction of the arrow (46) and arrives in a second gas pocket (22), lying thereabove, through an inlet opening (30). According to the invention, a non-return element (40) is arranged in the connecting channel (26) to avoid ingress of electrolyte (42) into the gas pocket (22).

(57) Zusammenfassung: Eine elektrochemische Halbzelle, die insbesondere zur elektrochemischen Herstellung von Chlor aus wässrigen Lösungen eines Alkalichlorids geeignet ist, weist einen Elektrodenraum (10) zur Aufnahme von Elektrolyt auf. Ferner sind mehrere Gastaschen (20, 22) zur Aufnahme von Gas vorgesehen. Eine Gasdiffusionselektrode (36) trennt die Gastaschen (20, 22) von dem Elektrodenraum (10). Ferner ist ein Verbindungskanal (26) vorgesehen, durch den zwei Gastaschen (20, 22) miteinander verbunden sind. In der unteren Gastasche (20) vorhandenes Gas kann durch eine Auslassöffnung (28) in dem Verbindungskanal (26) strömen. In diesem steigt es in Richtung des Pfeils (46) nach oben und gelangt durch eine Einlassöffnung (30) in eine darüber liegende zweite Gastasche (22). Um das Eindringen von Elektrolyt (42) in die Gastasche (22) zu vermeiden, ist in dem Verbindungskanal (26) erfindungsgemäss ein Rückhalteelement (40) angeordnet.

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