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[Continued on next page]

(54) Title: APPARATUS AND KIT FOR ENCAPSULATING AT LEAST ONE COMPOUND FOR THERAPEUTIC AND/OR DIAGNOSTIC USE IN ERYTHROCYTES

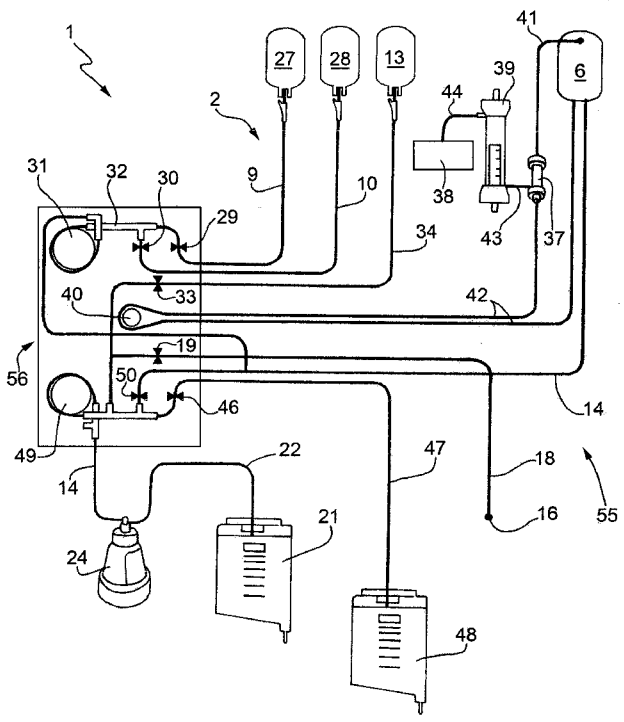


FIG.8

(57) Abstract: A portable and highly automated apparatus and method for introducing at least one compound within erythrocytes; the apparatus (1) comprises a reusable part (56) provided with mechanical elements such as pumps (31, 40, 49) and valves (10, 26, 29, 30, 33, 46, 50) and electronic units such as a control unit (15); the apparatus (1) also comprises a disposable part (55), which is adapted to come into contact with the sample containing the erythrocytes and is provided with a system (2) of tubes made of deformable material, a plurality of reservoirs (6, 13, 21, 27, 28, 39, 48) and one or more filters (37); the apparatus (2) allows a further concentration of the erythrocytes after they have been treated; the apparatus (1) allows to introduce the compound in the erythrocytes in a virtually totally automated manner.

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