

FIG. 1 - Exploded Smart-Cartridge Assembly

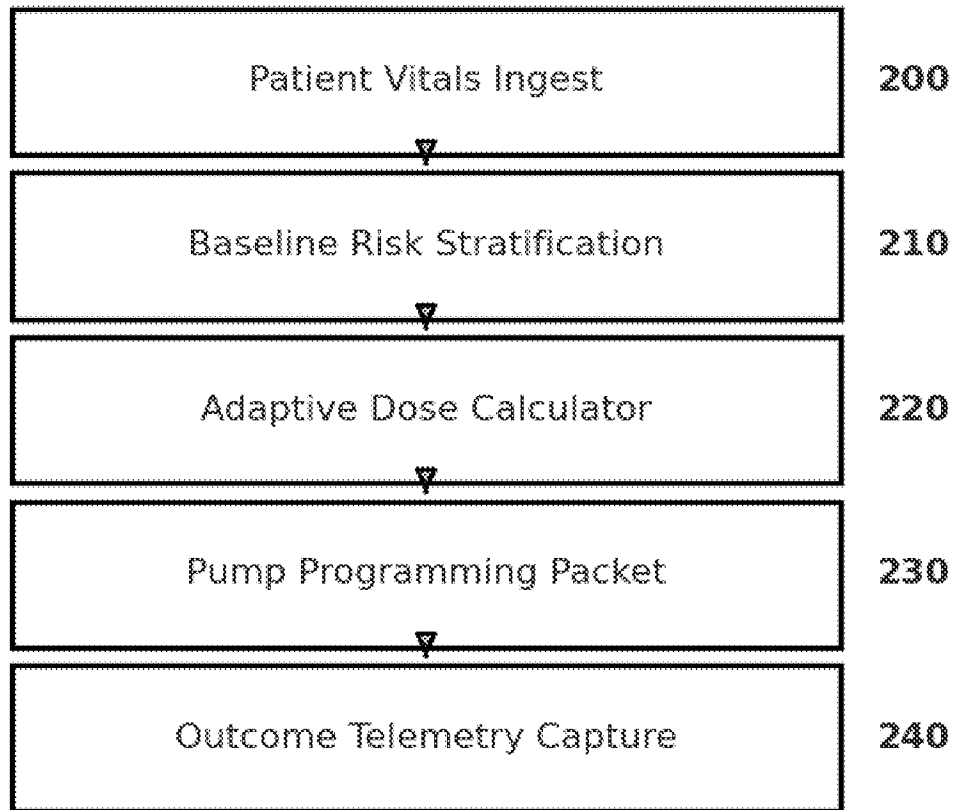


FIG. 2 - Dynamic Dose-Adjustment Workflow

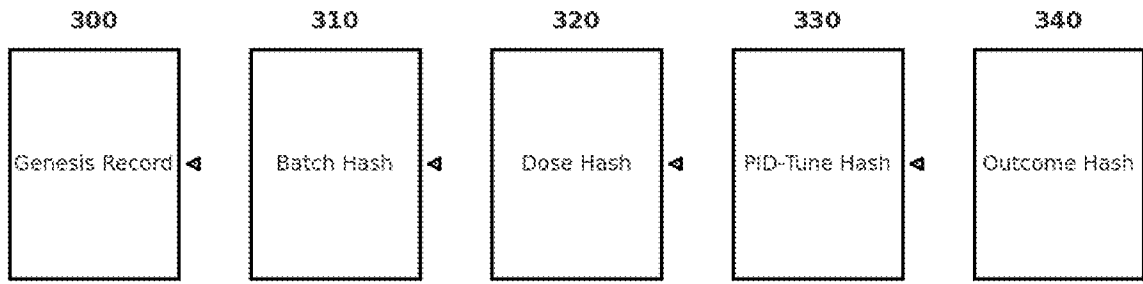


FIG. 3 - Immutable Ledger Hash-Chain

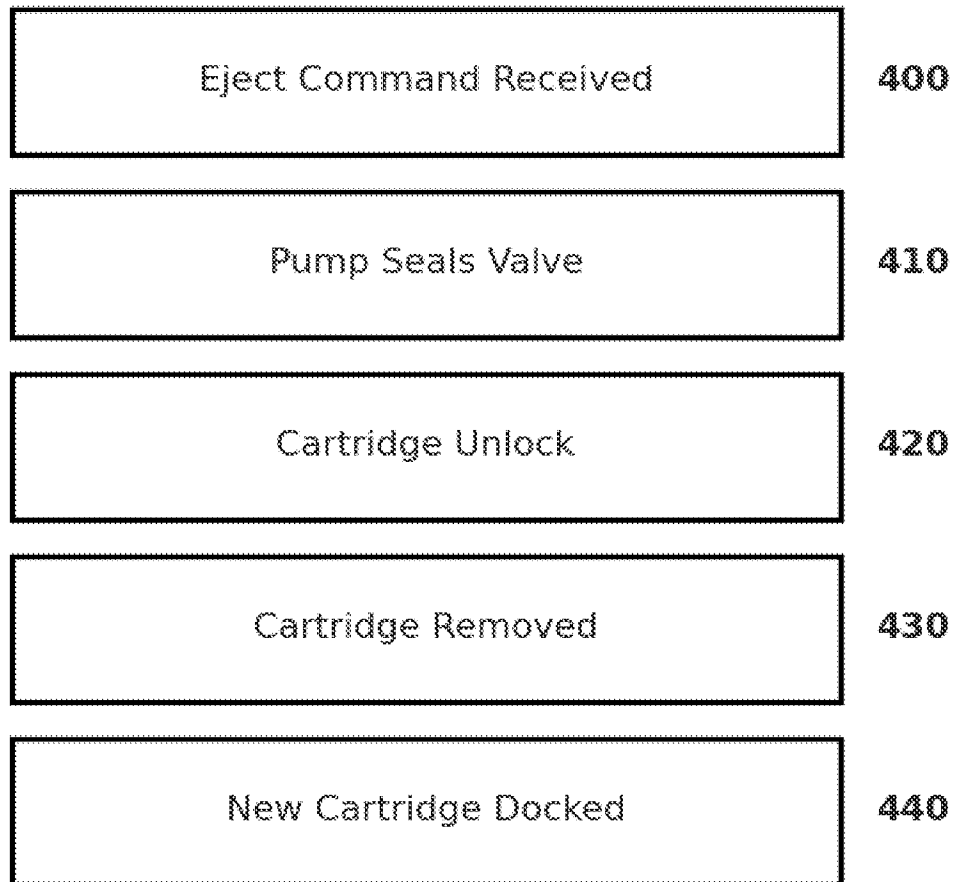


FIG. 4 – Cartridge Hot-Swap Sequence

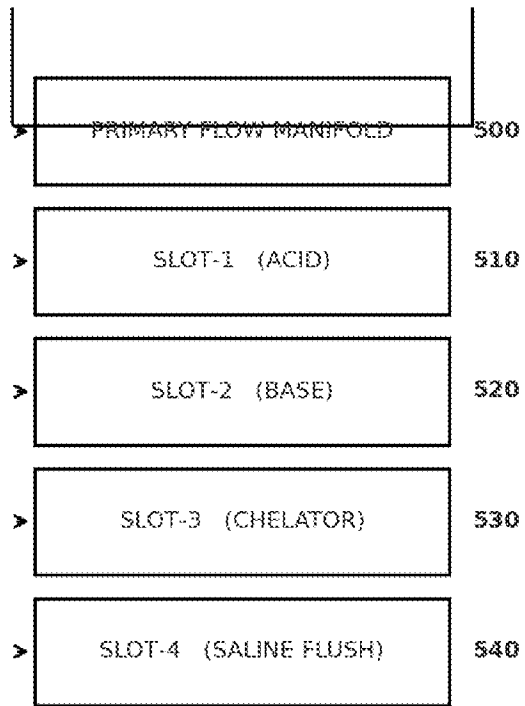


FIG. 5 - Five-Slot Manifold Assembly

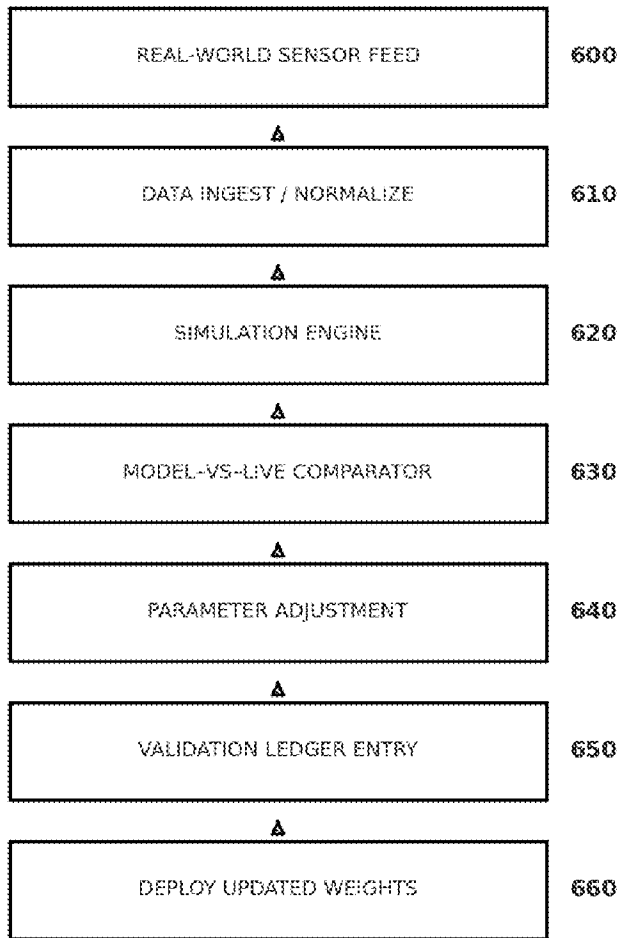


FIG. 6 - Digital-Twin Validation Flow

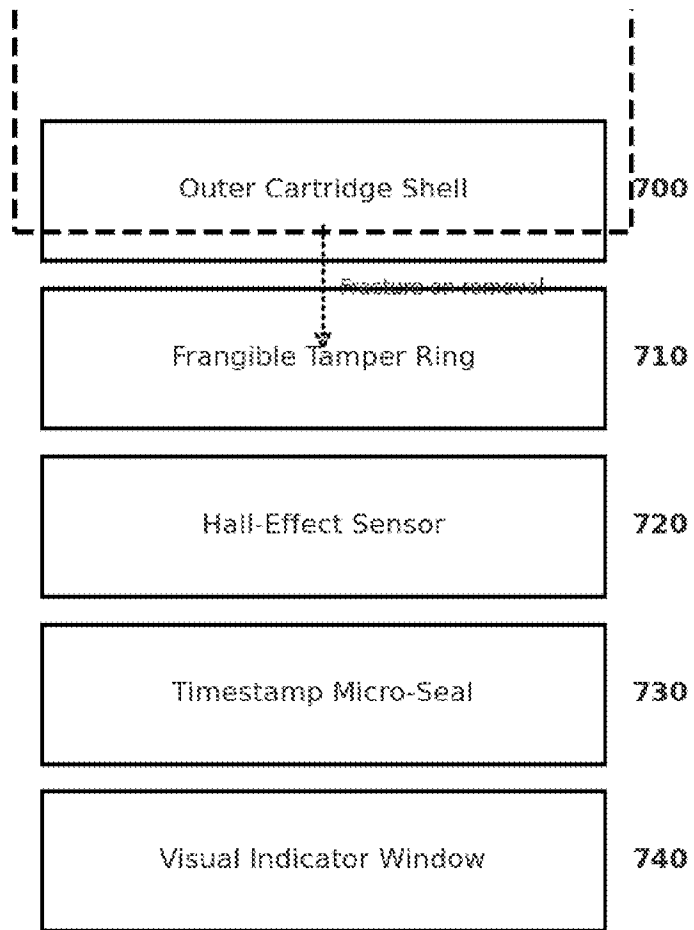


FIG. 7 – Physical Tamper-Evidence Mechanism

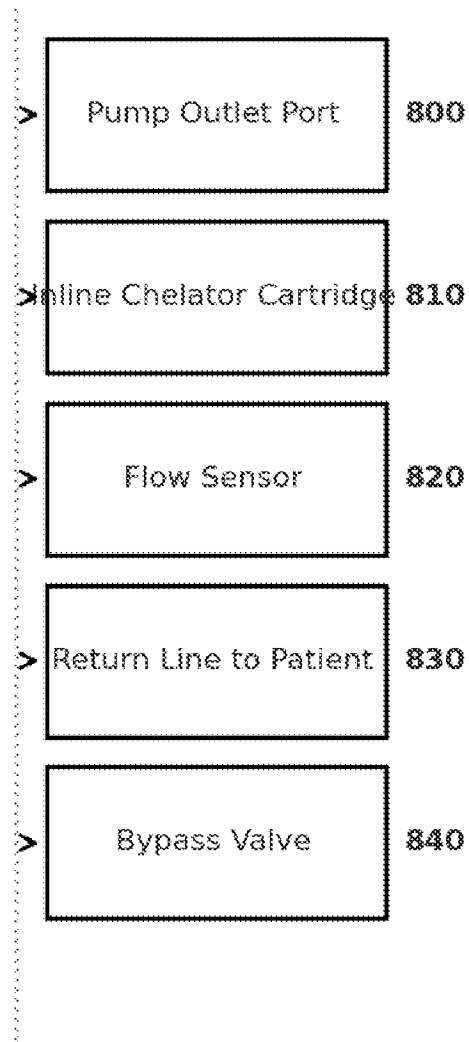
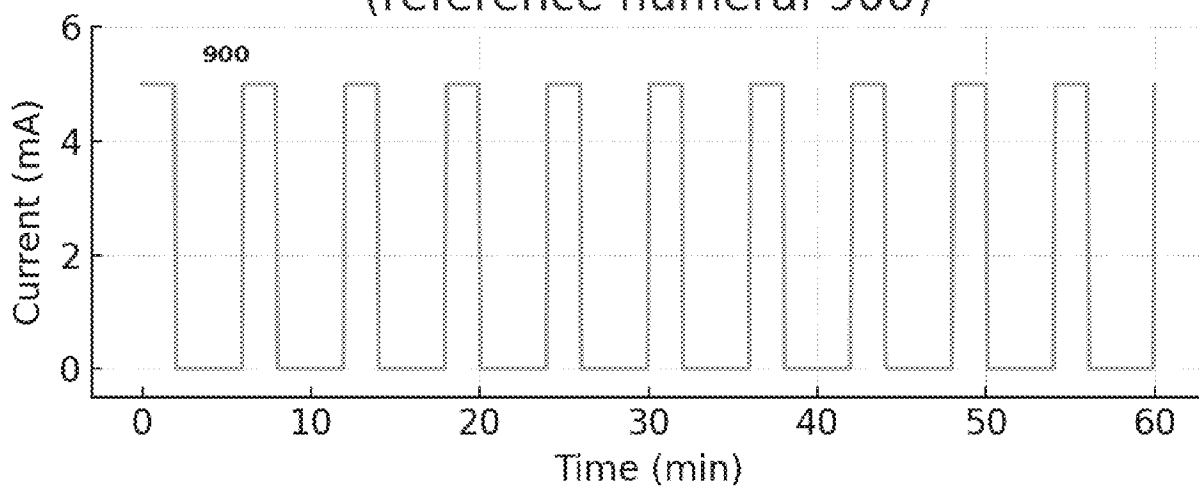


FIG. 8 - Chelator Counter-Measure Cartridge & Pump Integration

FIG. 9 - Iontophoresis Extraction Timing Diagram
(reference numeral 900)



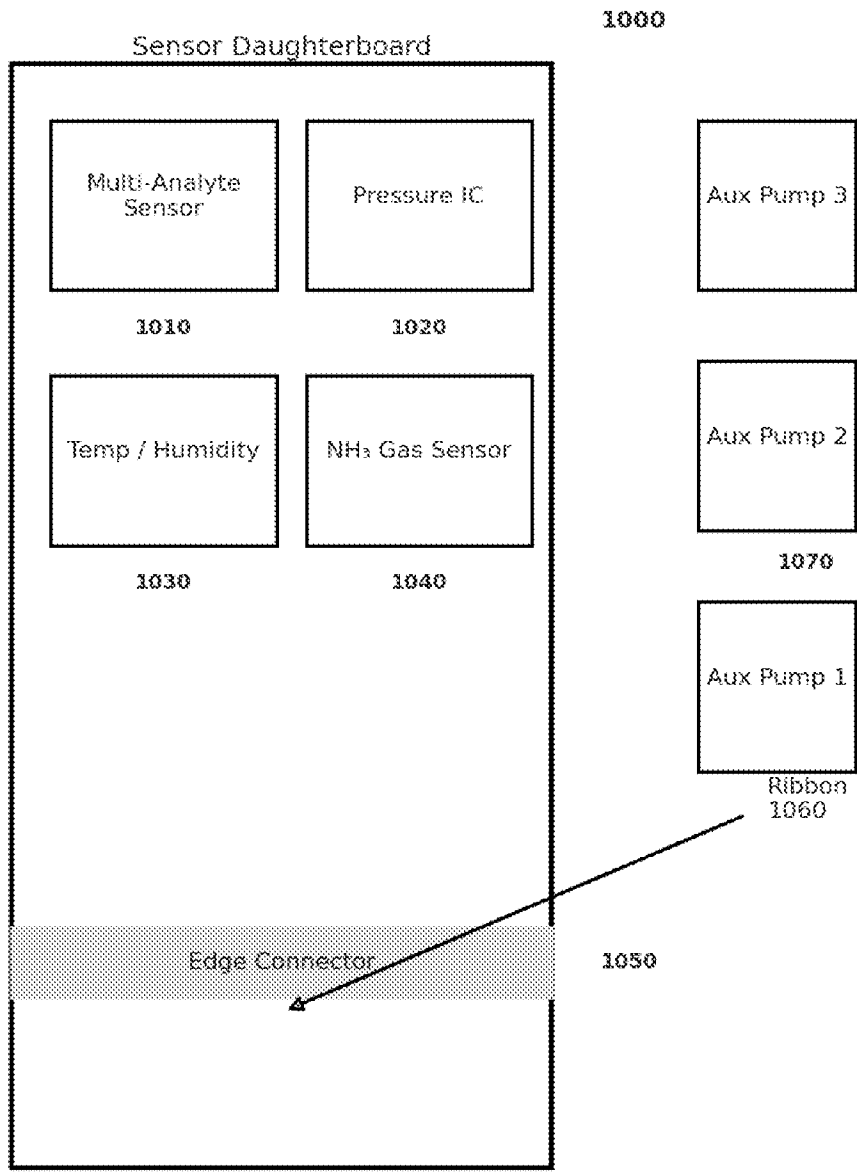


FIG. 10 – Critical-Factor Sensor Daughterboard & Auxiliary Pump Cassettes

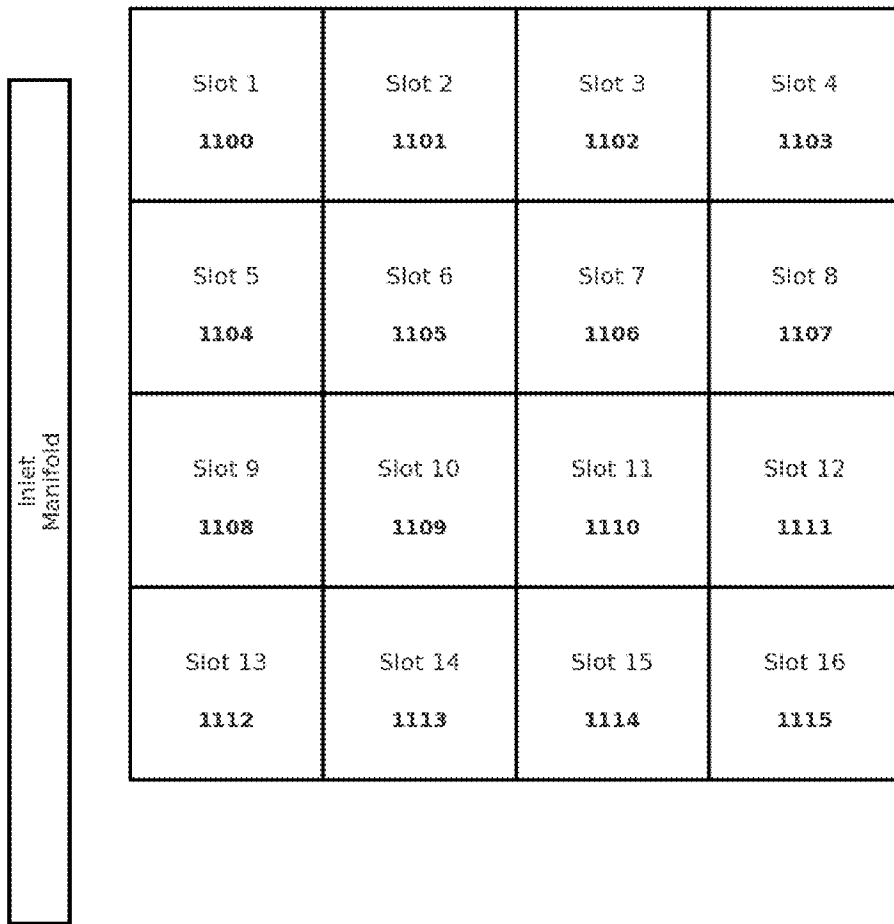


FIG. 11 - Pump-Bay Map (Slots 1 - 16)

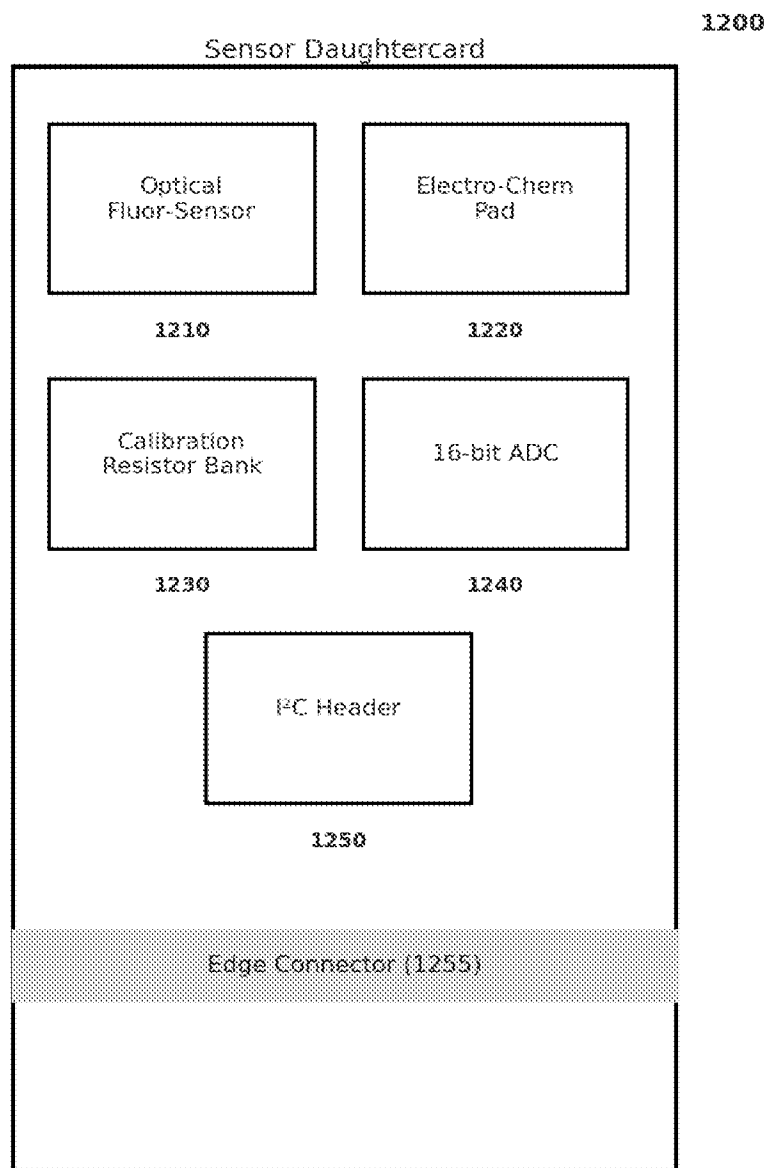


FIG. 12 - Multi-Analyte Sensor Daughtercard

| | | | | |
|-----------------|-----------------|-----------------|-----------------|---------------------|
| Slot 21 1300 | Slot 22 1301 | Slot 23 1302 | Slot 24 1303 | Outflow Manifold |
| Slot 25 1304 | Slot 26 1305 | Slot 27 1306 | Slot 28 1307 | |
| Slot 29 1308 | Slot 30 1309 | Slot 31 1310 | Slot 32 1311 | |
| Slot 33 1312 | Slot 34 1313 | Slot 35 1314 | Slot 36 1315 | |

FIG. 13 - Flex-Pump Sub-Manifold (Slots 21 - 36)

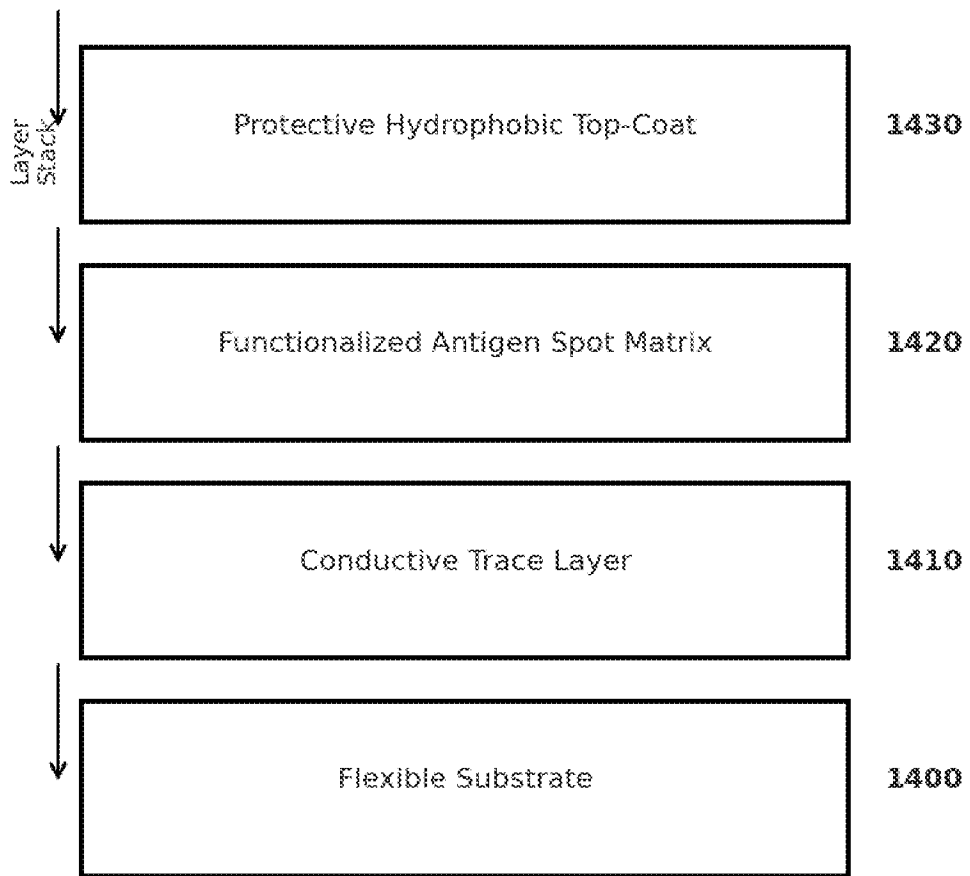


FIG. 14 - Multi-Infectious-Antigen Sensor Pad

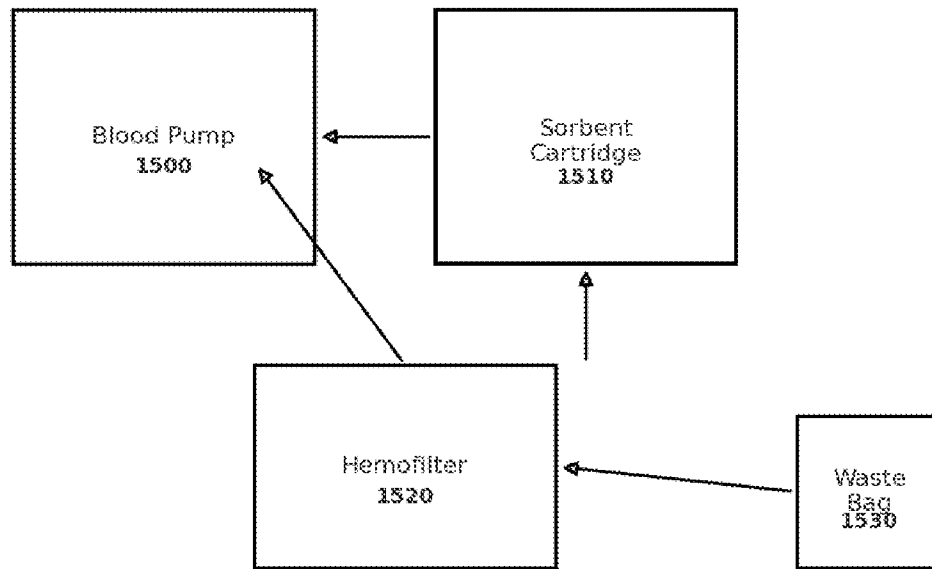
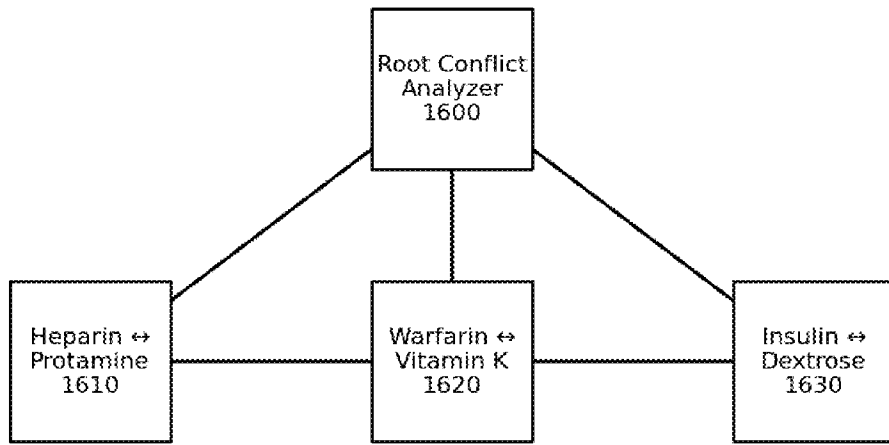


FIG. 15 - Endotoxin & HMGB-1 Sorbent Cartridge in CRRT Loop

FIG. 16 - Hierarchy & Knock-Down Conflict Graph



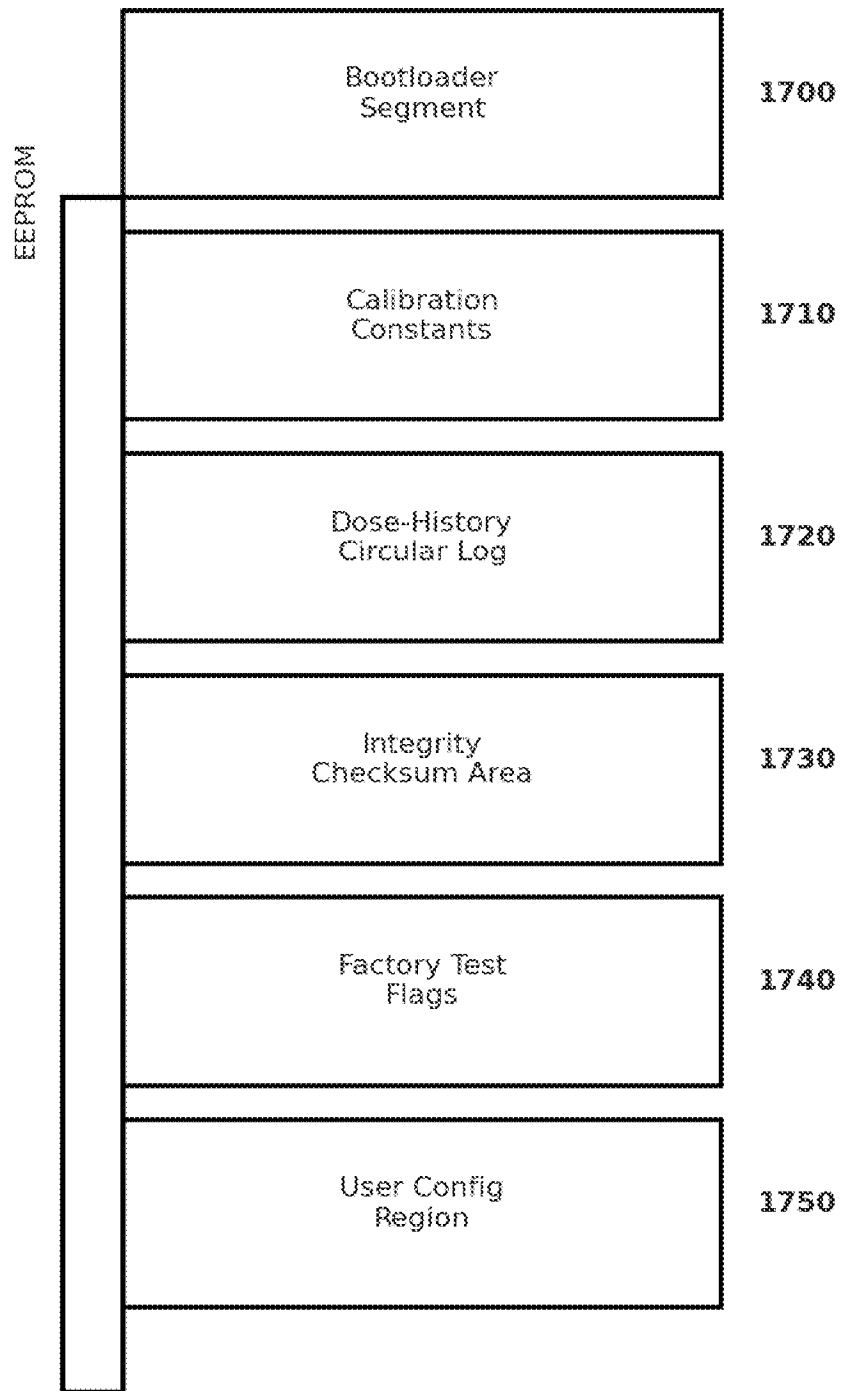


FIG. 17 – Smart-Cartridge EEPROM Memory Map

FIG. 18 - μ -Band Probe Convergence Curve (1800)

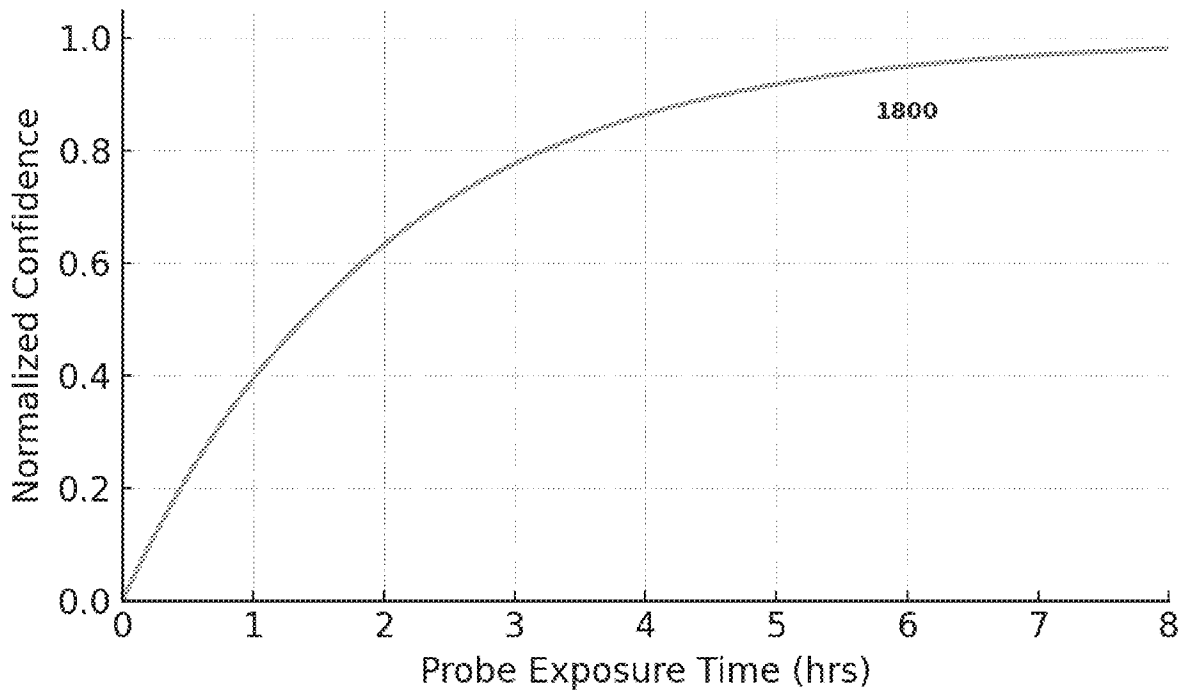


FIG. 19 – Sniffer Tap Data-Path Overview

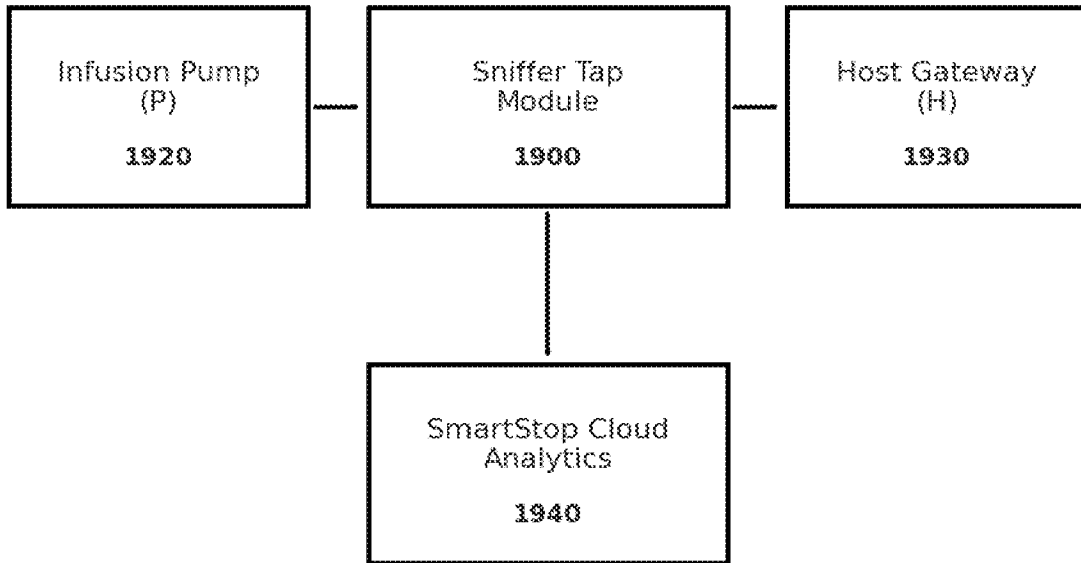


FIG. 20 - Sniffer Tap Hardware Exploded View

