**FIGURE 1**

DETA SYSTEM ARCHITECTURE

| **THREAT INPUT LAYER**<br><br>Network Traffic \| System Logs \| Sensor Data | 100 |

| **PREDICTIVE QUANTUM STATE CACHE** | 102 |

| 1M Threat States | 104 | O(1) Lookup | 106 | Quantum Hash | 108 | Background Evolution | 110 |

| **DELIBERATE ERROR TOLERANCE CONTROLLER** | 112 |

Critical: 0.1%   High: 0.3%   Med: 0.5%   Low: 1.0%

| **QUANTUM PROCESSING LAYER** | 114 |

| Photonic Processor<br>256 MZI<br>298K | 116 | FPGA Array<br>16 Units<br>143M Cells | 118 | ASIC Array<br>4 Units<br>16K PEs | 120 |

| **QUANTUM ENTANGLEMENT CORRELATION ENGINE**<br><br>Quantum Walks \| O(√n) Complexity \| Multi-vector | 122 |

| **DEFENSIVE AI AGENT LAYER (MWRASP)**<br><br>Autonomous Response \| Sub-10ms Mitigation | 124 |

50ns Syndrome Extraction

Feedback