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(54) **SYSTEMS, METHODS AND APPARATUS FOR LOCAL PROGRAMMING OF QUANTUM PROCESSOR ELEMENTS**

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(58) **Field of Classification Search** 341/133; 385/123, 125, 141, 142, 143; 365/160, 161, 365/162

See application file for complete search history.

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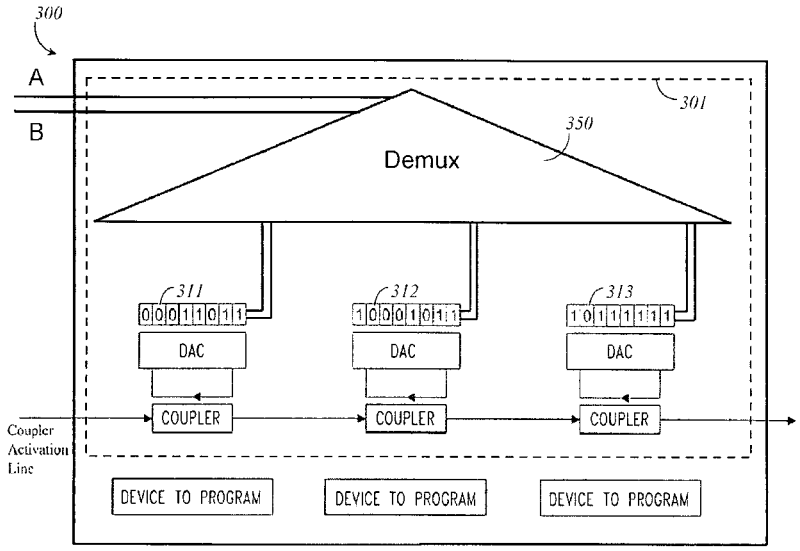
(57) **ABSTRACT**

Systems, methods and apparatus for a scalable quantum processor architecture. A quantum processor is locally programmable by providing a memory register with a signal embodying device control parameter(s), converting the signal to an analog signal; and administering the analog signal to one or more programmable devices.

34 Claims, 4 Drawing Sheets