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(57) Abstract :

This invention relates to a system for DNA Sequence Alignment and in particular, this invention relates to a system for DNA Sequence Alignment in which the Content-to-Address Memory (CTAM) and Augmented Binary Search Processor (ABSP) that uses parallel pipelined architecture. This invention relates to a system for DNA Sequence Alignment which focuses on the hardware-based solution to this problem by utilizing the broad concept of Associative Memory (AM). Furthermore, this invention also relates to a system for DNA Sequence Alignment which has the beneficial effects of having remarkable high-speed, saving power cost, reducing labor intensity, and having safety and reliability and low cost.

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