

(54) Title of the invention : METHOD FOR ASSEMBLY OF NUCLEIC ACID SEQUENCE DATA

(51) International classification :G06F19/22
 (31) Priority Document No :61/493541
 (32) Priority Date :06/06/2011
 (33) Name of priority country :U.S.A.
 (86) International Application No :PCT/IB2012/052613
 Filing Date :24/05/2012
 (87) International Publication No :WO 2012/168815
 (61) Patent of Addition to Application Number :NA
 Filing Date :NA
 (62) Divisional to Application Number :NA
 Filing Date :NA

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(57) Abstract :

The present invention relates to a method for assembly of nucleic acid sequence data comprising nucleic acid fragment reads into (a) contiguous nucleotide sequence segment(s) comprising the steps of: (a) obtaining a plurality of nucleic acid sequence data from a plurality of nucleic acid fragment reads; (b) aligning said plurality of nucleic acid sequence data to a reference sequence;(c) detecting one or more gaps or regions of non assembly or non matching with the reference sequence in the alignment output of step (b);(d) performing de novo sequence assembly of nucleic acid sequence data mapping to said gaps or regions of non assembly; and (e) combining the alignment output of step (b) and the assembly output of step (d) in order to obtain (a) contiguous nucleotide sequence segment(s). In addition a corresponding program element or computer program for assembly of nucleic acid sequence data and a sequence assembly system for transforming nucleic acid sequence data comprising nucleic acid fragment reads into (a) contiguous nucleotide sequence segment(s) is provided.

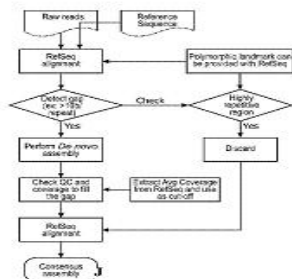


FIG. 4