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SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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(54) **Title:** IN SITU NEURAL NETWORK CO-PROCESSING

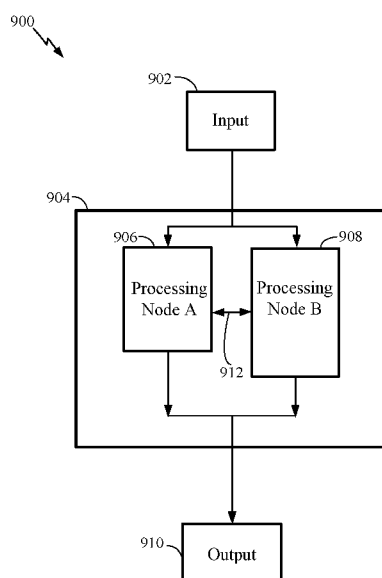


FIG. 9

(57) **Abstract:** A method of executing co-processing in a neural network comprises swapping a portion of the neural network to a first processing node for a period of time. The method also includes executing the portion of the neural network with the first processing node. Additionally, the method includes returning the portion of the neural network to a second processing node after the period of time. Further, the method includes executing the portion of the neural network with the second processing node.



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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 418 423 B1 (KAMBHATLA NANDAKISHORE [US] ET AL) 9 July 2002 (2002-07-09) columns 4-10	1-28
X	----- D. CALVERT ET AL: "Distributed artificial neural network architectures", PROCEEDINGS OF THE 19TH INTERNATIONAL SYMPOSIUM ON HIGH PERFORMANCE COMPUTING SYSTEMS AND APPLICATIONS (HPCS'05), 15 May 2005 (2005-05-15), pages 2-10, XP010800324, DOI: 10.1109/HPCS.2005.24 section II ----- -/--	1-28



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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	C. ROSSANT ET AL: "Playdoh: a lightweight Python library for distributed computing and optimisation", JOURNAL OF COMPUTATIONAL SCIENCE, vol. 4, no. 5, 6 July 2011 (2011-07-06), pages 352-359, XP055183262, DOI: 10.1016/j.jocs.2011.06.002 sections 2 and 4.1 -----	1-28
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X	E. SCHIKUTA, E. MANN: "N2Sky - neural networks as services in the clouds", PROCEEDINGS OF THE 2013 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS (IJCNN'13), 4 August 2013 (2013-08-04), XP032542139, DOI: 10.1109/IJCNN.2013.6707113 the whole document -----	1-28
X	K. MINKOVICH ET AL: "HRLSim: a high performance spiking neural network simulator for GPGPU clusters", IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS, vol. 25, no. 2, 15 August 2013 (2013-08-15), pages 316-331, XP011536922, DOI: 10.1109/TNNLS.2013.2276056 section III -----	1-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6418423	B1	09-07-2002	NONE
