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(71) Applicant: HONEYWELL INC. [US/US]; 101 Columbia Avenue, P.O. Box 2245, Morristown, NJ 07960 (US).

(72) Inventors: GOOSSEN, Emray, Ray; 1604 Ranch Tr. S.E., Albuquerque, NM 87123 (US). ANDERSON, Charles, Boyd; 4908 Larchmont, N.E., Albuquerque, NM 87111 (US).

(74) Agents: HOIRIIS, David et al.; Honeywell Inc., 101 Columbia Avenue, P.O. Box 2245, Morristown, NJ 07960 (US).

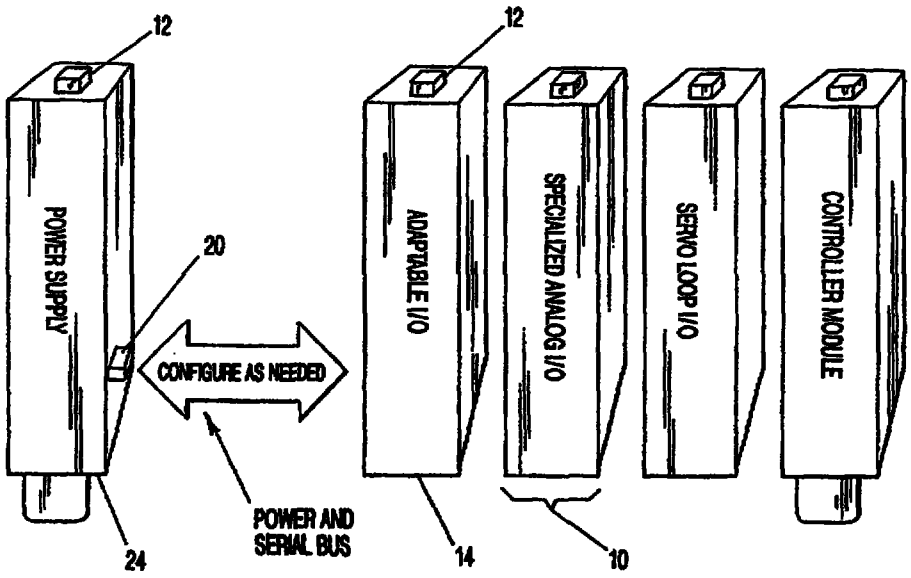
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(54) Title: SCALABLE DATA COLLECTION AND COMPUTING APPARATUS



(57) Abstract: A method and apparatus for collecting and distributing information to and from a computing element that is quickly scalable at the installation to varying types and numbers of signals. Standard sized modules (10) containing a generalized set of computation, discrete I/O, analog I/O, serial I/O, adaptable I/O, etc., or any combination thereof, provide the building blocks that can be attached to each other to provide the desired combination of functions. These modular components are mated to each other through a simple serial interface providing the inter-module communication interface and local power requirements. The modules are quickly stacked together and snapped in place in a manner supporting severe environmental conditions.

WO 01/14979 A1

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