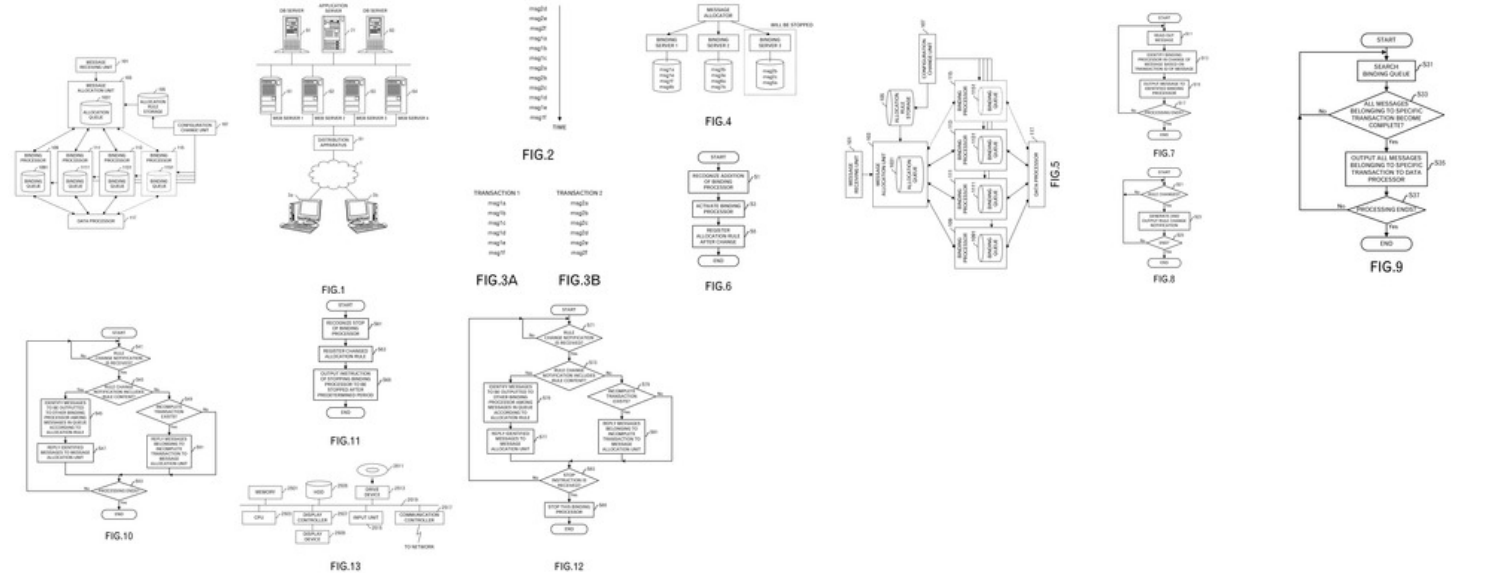


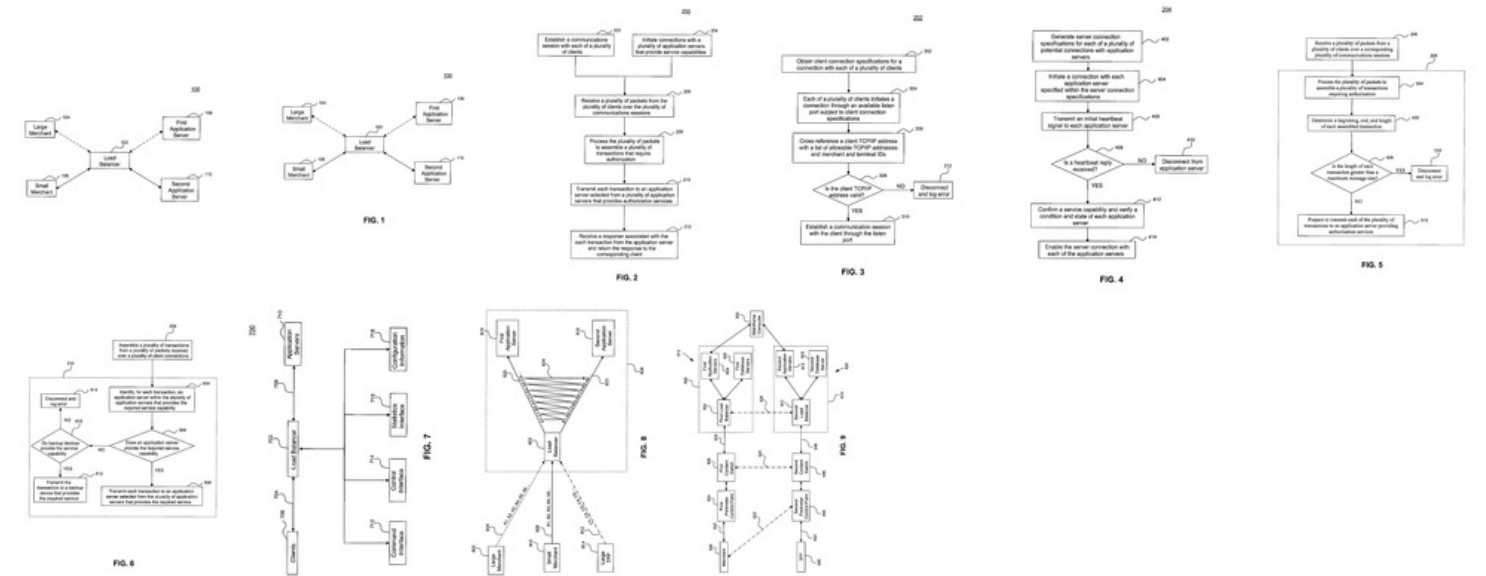
#	Title	Publication number	1st app. date	Applicant/Assignee	1st publ. date	Publ. date
1.	Message binding processing technique	US20090292810	2008-05-23	FUJITSU*	2009-11-26	2009-11-26

An apparatus has a unit that receives plural messages, which belong to plural transactions and respectively have a pertinent transaction identifier, in an indefinite order; plural processors each having a queue storing the messages belonging to a transaction in charge, and outputting, after the messages belonging to one of the transactions in charge have become complete, the complete messages in the queue to a message processing unit; an allocation unit that outputs the received message to one of the plural processors, wherein one of the processors is identified based on the transaction identifier of the received message and an allocation rule predetermined for the transaction identifier; and a change unit that changes the allocation rule when activating or stopping the processor. When the change unit changes the allocation rule, each of the processors outputs at least messages for which re-allocation is necessary to the allocation unit.

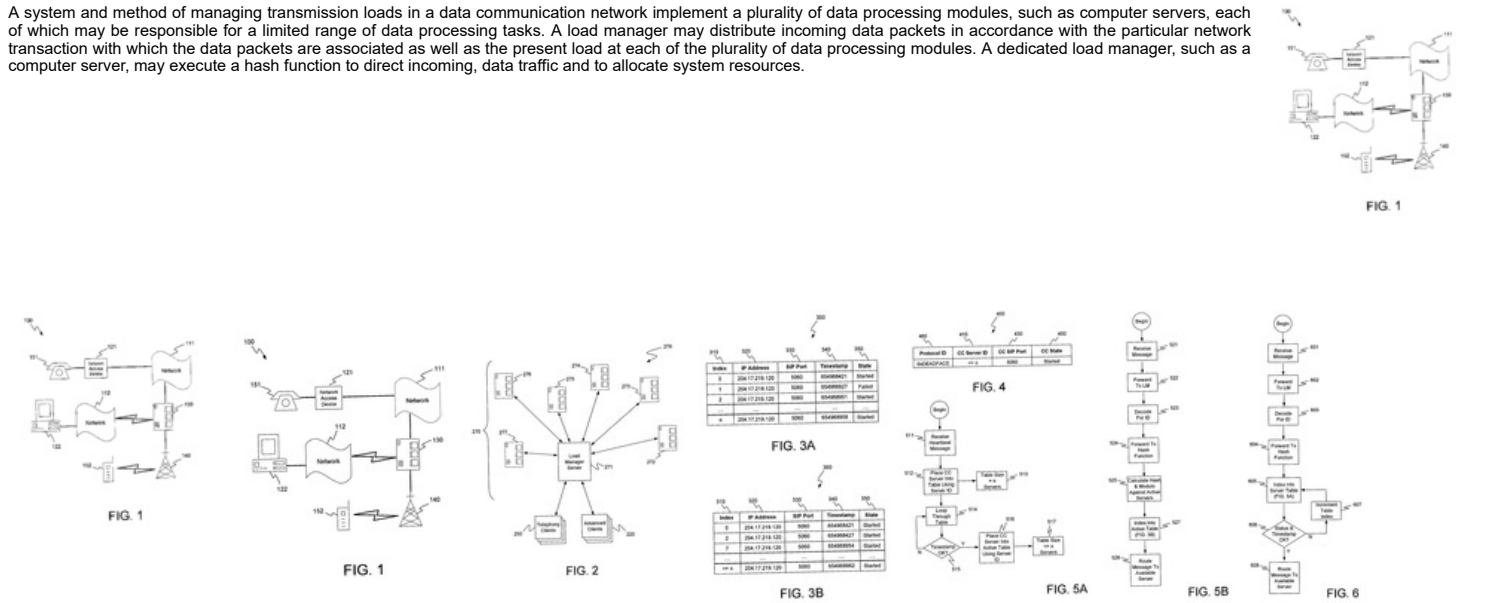


2.	Systems, methods, and computer program products for transaction based load balancing	US20080072226	2007-06-22	LIBERTY PEAK VENTURES*	2008-03-20	2008-03-20
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In a packet-based transaction processing system, workload is balanced across multiple computer systems. A plurality of packets is received from a plurality of clients over a plurality of communications sessions. Each of the plurality of packets includes a portion of a transaction involving a financial transaction instrument that requires authorization. The plurality of packets are processed to assemble a plurality of transactions. Each of the plurality of transactions is then transmitted to an application server selected from a plurality of servers that provides authorization for the transactions. The server may be selected from the plurality of servers based on a round-robin distribution of the plurality of servers, and additionally, the round-robin distribution may be modified to account for a workload on each of the plurality of servers.

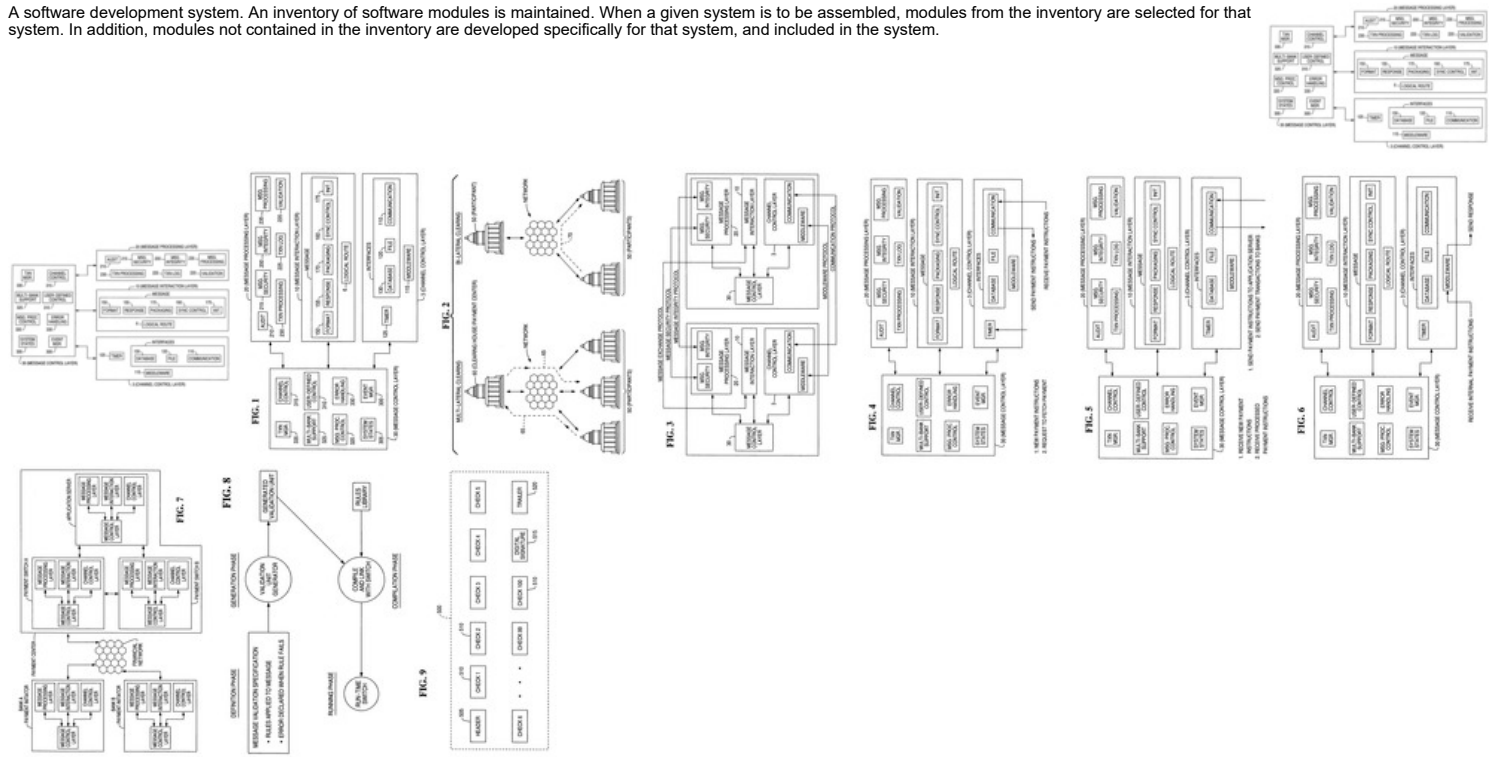


A system and method of managing data transmission loads in a data communication network implement a plurality of data processing modules, such as computer servers, each of which may be responsible for a limited range of data processing tasks. A load manager may distribute incoming data packets in accordance with the particular network transaction with which the data packets are associated as well as the present load at each of the plurality of data processing modules. A dedicated load manager, such as a computer server, may execute a hash function to direct incoming, data traffic and to allocate system resources.

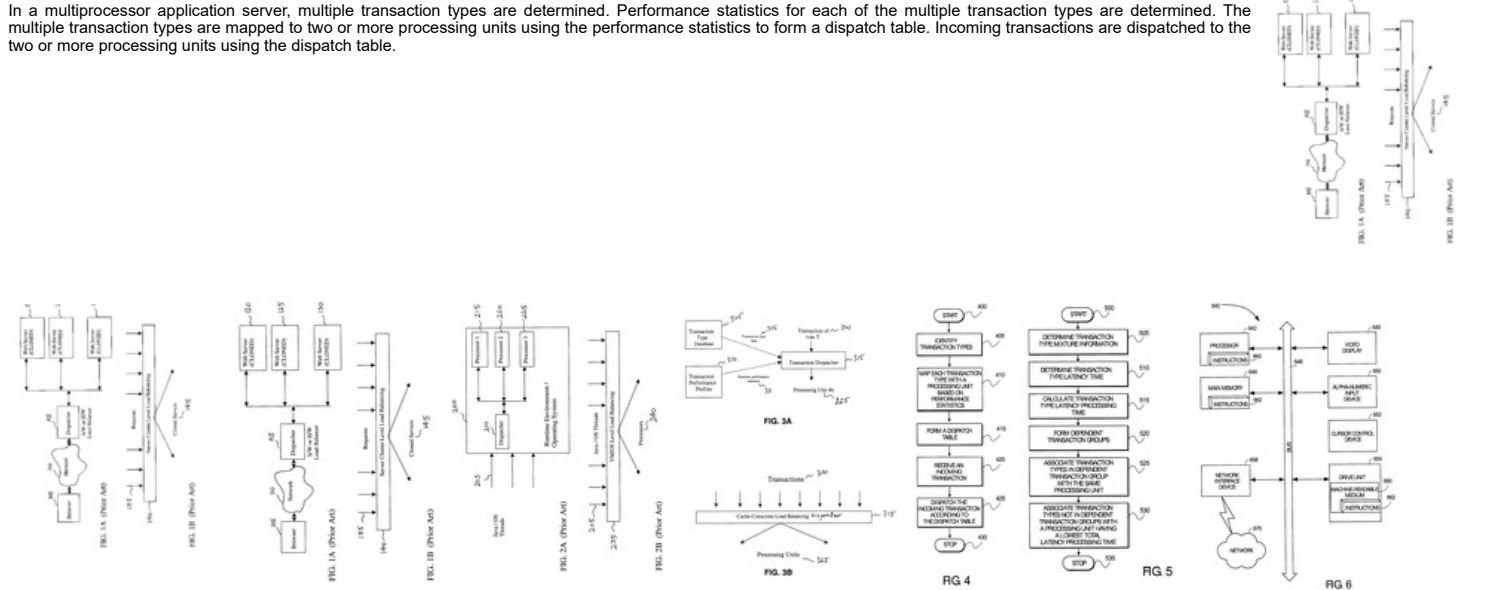


4. Software development system having particular adaptability to financial payment switchesUS71311082000-04-17NCR*2006-10-312006-10-31

A software development system. An inventory of software modules is maintained. When a given system is to be assembled, modules from the inventory are selected for that system. In addition, modules not contained in the inventory are developed specifically for that system, and included in the system.

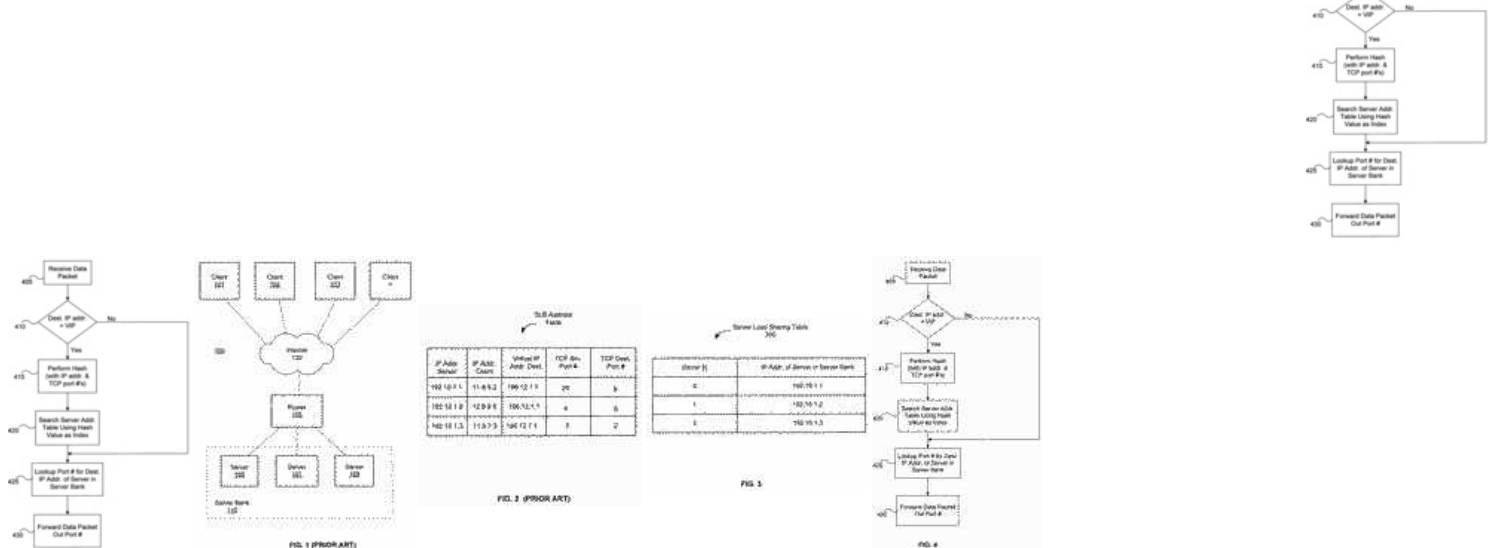


In a multiprocessor application server, multiple transaction types are determined. Performance statistics for each of the multiple transaction types are determined. The multiple transaction types are mapped to two or more processing units using the performance statistics to form a dispatch table. Incoming transactions are dispatched to the two or more processing units using the dispatch table.



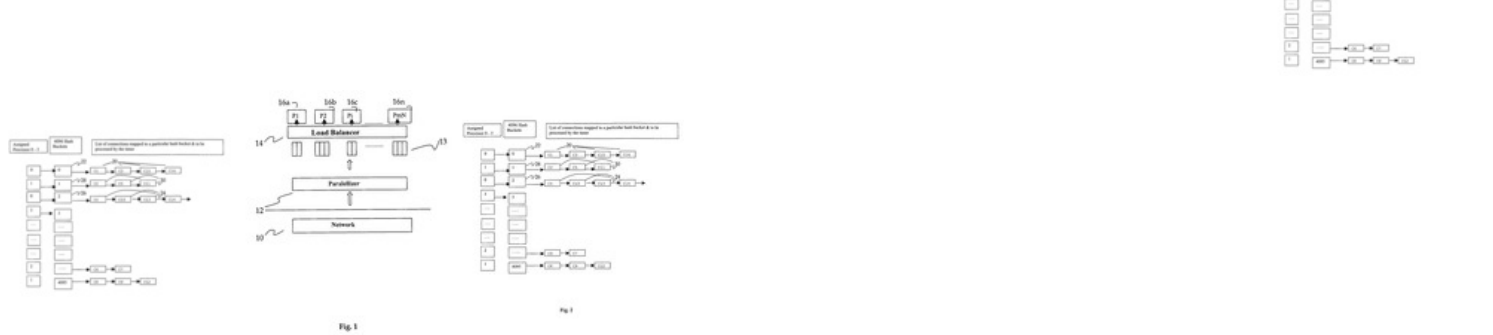
6. **Method and apparatus for server load balancing** US6980550 2001-01-16 EXTREME NETWORKS* 2005-12-27 2005-12-27

A method for forwarding data packets to one of a plurality of servers comprising receiving a data packet from a source, at a data packet forwarding device having a plurality of ports, performing a hashing function using a unique component of the data packet as a seed value for the hash, generating a hash value using the hashing function, looking up a table for an address of one of the plurality of servers using the hashed value as an index to the table, and forwarding the data packet to a server corresponding to the address.



7. **System and method for balancing tcp/ip/workload of multi-processor system based on hash buckets** US7020713 2000-10-10 APPLE* 2006-03-28 2006-03-28

A method and system is provided for balancing work load for a plurality of computer processors in a multiple processor computer system. In such a system, there are a plurality of packets to be processed. First, a plurality of hash buckets are generated and each packet is assigned to a bucket by performing a predetermined hash function. The different hash buckets are then assigned to the processors based on the workload of all the processors. In connection with processing connections with a timer thread, a plurality of connections are processed with a plurality of timer threads. A plurality of hash buckets are provided, and each connection is mapped to one of the hash buckets. Further, each hash bucket is assigned to a processor timer thread based on a workload thereof.



A semi-dynamic load balancer for a transaction processing system reallocates transaction types among computers in the system as a group rather than as individual transactions. Statistical data is accumulated in an affinity matrix which records the number of times a transaction type i was blocked by transaction type j was holding a lock on a data item that transaction type i wanted to access. When an overloaded computer is detected, transaction types are reallocated on the computers of the system according to a transaction type routing table which is updated based on data from the affinity matrix.

