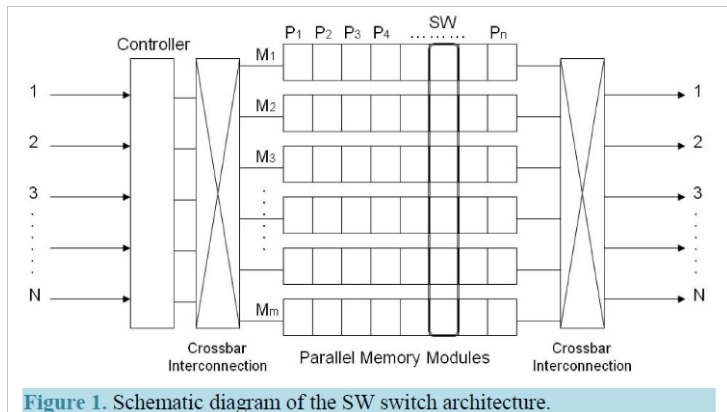


# Sliding-Window (SW) Packet Switch for Priority Switching

Packet switches and routers have grown in both size and capacity to handle delay-throughput performance, in order to keep pace with the exponential growth in networks and internet data traffic, especially bursty traffic. This data traffic dynamicity is currently handled by implementing shared-memory based switching systems. However, the efficiency of shared-memory based switches severely drops with increase in memory size and speed capacity due to several limitations, such as high memory bandwidth requirements, segregations of memory space, and centralized control of switching functions.

This invention suggests ways to resolve the memory-speed (i.e., scalability) limitation of shareable parallel memory module based internet switches. Using a sliding-window based switching system, this technology enables assignment of independent, parallel and decentralized memory locations to the incoming packets using a multi-dimensional array and queuing techniques.



(image source: inventor)

For further information regarding this technology please contact:

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## Competitive Advantages

- Enables designing high-performance routers and switches
- Ideal for cloud computing platform and server farm switching
- Assures superior performance in terms of reducing memory conflicts, scalability and throughput performance
- Supports switching capacity 150Gbps – to 1000 Gbps (=1 Tbps)
- Compatible with existing Layer 2 and 3 protocols

## Commercial Applications

- High capacity Internet routers
- Gigabit Ethernet switches
- Broadband access equipment
- xDSL access equipment
- PON-based access equipment
- HFC access equipment

## IP Status

- Patents granted

## Status of Development

- Seeking implementation and research advancement partners

## Lead Inventor



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