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(54) **Title:** MULTIKERNEL ARCHITECTURE AND VIRTUAL MACHINES

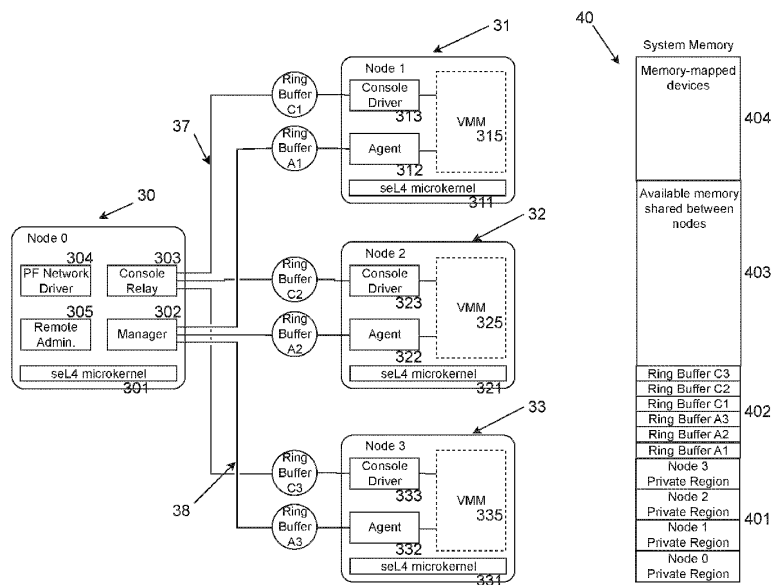


Figure 3

(57) **Abstract:** A computer system having a multikernel architecture comprising a plurality of operating system microkernels is described. The computer system comprises a plurality of processing cores, a memory comprising a plurality of private memory areas and a shared memory area, and a plurality of computing nodes each comprising one or more of the processing cores and further comprising one of the plurality of operating system microkernels and an associated user space for non-kernel operations, wherein only the operating system microkernel runs at a highest privilege level of the processing core, or processing cores, of a computing node. Each of the plurality of computing nodes has an associated private memory area from the plurality of private memory areas for use by its operating system microkernel, and for non-kernel operations each of the plurality of computing nodes accesses the shared memory area. Associated methods and computer systems are also described.

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