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- (71) **Applicant** (for all designated States except US):
AMAZON TECHNOLOGIES, INC. [US/US]; PO Box 8102, Reno, NV 89507 (US).
- (72) **Inventor; and**
- (75) **Inventor/Applicant** (for US only): **MARR, Michael David** [US/US]; 410 Terry Ave North, Seattle, WA 98109-5210 (US).
- (74) **Agent:** **LOHR, Jason, D.**; Novak Druce + Quigg LLP, 555 Mission Street, 34th Floor, San Francisco, CA 94105 (US).
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(54) **Title:** INCREMENTAL HIGH RADIX NETWORK SCALING

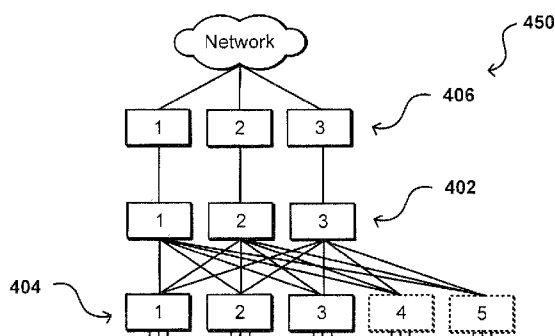


FIG. 4(b)

(57) **Abstract:** Efficient and highly-scalable network solutions are provided that utilize incremental scaling of switches, and devices connected to those switches, in an environment such as a data center. Embodiments may utilize multiple tiers of switches. Sets of switches in two different tiers may be initially connected to each other utilizing multiple connections. As network capacity needs within the computing environment increase, additional switches may be added to tiers. To connect the added switches to the switch network, the redundant connections may be utilized. Moving connections from one switch to another switch can free up ports to connect added switches in one of the tiers of switches to the switch network. The tiers of switches can be based on Clos networks, where the tiers of switches are fully connected, or other high radix or fat tree topologies that include oversubscription between tiers.

