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International application number: PCT/US2008/056064

International filing date: 06 March 2008 (06.03.2008)

Certified copy of priority document Document type:

Document details: Country/Office: US

> Number: 60/905,526

Number: Filing date: 06 March 2007 (06.03.2007)

Date of receipt at the International Bureau: 29 March 2008 (29.03.2008)

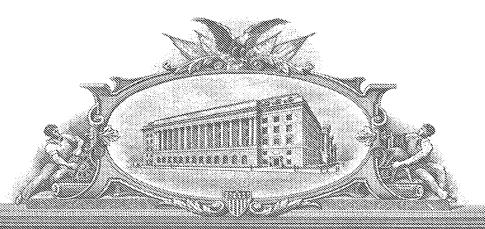
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| Application Data Sheet. See 37 CFR 1.76 CD(s), Number of CDs  |  |                                   |             |                 |   |  |
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# LARGE SCALE CROSSPOINT REDUCTION WITH NONBLOCKING UNICAST & MULTICAST IN ARBITRARILY LARGE MULTI-STAGE NETWORKS

Venkat Konda

#### **BRIEF DESCRIPTION OF DRAWINGS**

- FIG. 1A is a diagram of an exemplary multi-stage symmetrical network of five stages with N = 8 and d = 2 with exemplary unicast and multicast connections, strictly nonblocking network for unicast connections and rearrangeably nonblocking network for arbitrary fan-out multicast connections, in accordance with the invention.
- FIG. 1B is a diagram of a general symmetrical multi-stage network with  $(2 \times \log_d N) 1$  stages strictly nonblocking network for unicast connections and rearrangeably nonblocking network for arbitrary fan-out multicast connections in accordance with the invention.
- FIG. 2A is a diagram of an exemplary multi-stage symmetrical network of five stages with N=8 and d=2 with exemplary unicast and multicast connections, strictly nonblocking network for unicast and arbitrary fan-out multicast connections, in accordance with the invention.
- FIG. 2B1 & FIG. 2B2 is a diagram of a general symmetrical multi-stage network with  $(2 \times \log_d N) 1$  stages strictly nonblocking network for unicast and arbitrary fan-out multicast connections in accordance with the invention.
  - FIG. 3A is a diagram of an exemplary multi-stage symmetrical network of five stages with N = 8 and d = 2, rearrangeably nonblocking network for unicast connections, in accordance with the invention.



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