

Title (en)

FRAMEWORKS AND INTERFACES FOR OFFLOAD DEVICE-BASED PACKET PROCESSING

Title (de)

RAHMEN UND SCHNITTSTELLEN ZUR ENTLASTUNG EINER VORRICHTUNGSBASIERTEN PAKETVERARBEITUNG

Title (fr)

STRUCTURES ET INTERFACES POUR UN TRAITEMENT DE PAQUETS BASÉ SUR UN DISPOSITIF DE DÉLESTAGE

Publication

**EP 2691865 A4 20160525 (EN)**

Application

**EP 12763168 A 20120329**

Priority

- US 201113076339 A 20110330
- US 201113076347 A 20110330
- US 2012031121 W 20120329

Abstract (en)

[origin: WO2012135442A1] High-speed processing of packets to, and from, a virtualization environment can be provided while utilizing hardware-based segmentation offload and other such functionality. A hardware vendor such as a network interface card (NIC) manufacturer can enable the hardware to support open and proprietary stateless tunneling in conjunction with a protocol such as single root I/O virtualization (SR-IOV) in order to implement a virtualized overlay network. The hardware can utilize various rules, for example, that can be used by the NIC to perform certain actions, such as to encapsulate egress packets and decapsulate packets.

IPC 8 full level

**G06F 9/50** (2006.01); **H04L 45/60** (2022.01); **H04L 47/43** (2022.01); **G06F 9/455** (2006.01); **H04L 45/50** (2022.01)

CPC (source: CN EP)

**G06F 9/45558** (2013.01 - CN EP); **G06F 9/5027** (2013.01 - CN EP); **H04L 63/0227** (2013.01 - EP); **H04L 69/166** (2013.01 - EP); **G06F 2009/45595** (2013.01 - CN EP); **G06F 2209/509** (2013.01 - CN EP)

Citation (search report)

- [I] US 2011010469 A1 20110113 - KINSEY JEFFREY BRIAN [US], et al
- [A] US 2009287848 A1 20091119 - KAMURA KOICHIRO [JP], et al
- [I] GANGULY A ET AL: "WOW: Self-organizing Wide Area Overlay Networks of Virtual Workstations", JOURNAL OF GRID COMPUTING, KLUWER ACADEMIC PUBLISHERS, DO, vol. 5, no. 2, 15 April 2007 (2007-04-15), pages 151 - 172, XP019501190, ISSN: 1572-9184, DOI: 10.1007/S10723-007-9076-6
- [A] KI HYUN KIM ET AL: "Implementation of 10 Giga VPN accelerator board", 2006 8TH INTERNATIONAL CONFERENCE ADVANCED COMMUNICATION TECHNOLOGY, 22 February 2006 (2006-02-22), pages 5 pp. - 1556, XP055266750, ISBN: 978-89-551912-9-5, DOI: 10.1109/ICACT.2006.206281
- See also references of WO 2012135442A1

Cited by

US10565002B2; US11099885B2; US11656900B2; US11941427B2

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**WO 2012135442 A1 20121004**; AU 2012236513 A1 20131031; AU 2012236513 A8 20131205; AU 2012236513 B2 20150205; BR 112013024883 A2 20161220; BR 112013024883 B1 20210629; BR 112013024883 B8 20211103; CA 2831705 A1 20121004; CA 2831705 C 20171003; CA 2951949 A1 20121004; CA 2951949 C 20190115; CA 2951952 A1 20121004; CA 2951952 C 20190115; CA 2951970 A1 20121004; CA 2951970 C 20180213; CN 104054067 A 20140917; CN 104054067 B 20170908; CN 107450966 A 20171208; CN 107450966 B 20210806; EP 2691865 A1 20140205; EP 2691865 A4 20160525; EP 4106301 A1 20221221; JP 2014512760 A 20140522; JP 2016028479 A 20160225; JP 2017126998 A 20170720; JP 2018011331 A 20180118; JP 5869099 B2 20160224; JP 6207559 B2 20171004; JP 6360576 B2 20180718; JP 6487979 B2 20190320; SG 194017 A1 20131129

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