IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WSOU INVESTMENTS, LLC d/b/a BRAZOS LICENSING AND DEVELOPMENT, Plaintiff, v. HUAWEI INVESTMENT & HOLDING CO., LTD., HUAWEI TECHNOLOGIES CO., LTD., HUAWEI TECHNOLOGIES USA INC., HUAWEI DEVICE CO. LTD. (f/k/a HUAWEI DEVICE (DONGGUAN) CO.), HUAWEI DEVICE (SHENZHEN) CO., LTD. (f/k/a HUAWEI DEVICE CO., LTD.), HUAWEI DEVICE USA, INC. Defendants.	§ § § § § § § § § § § § § § § §	CIVIL ACTION NO. 6:20-cv-204 **JURY TRIAL DEMANDED**

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff WSOU Investments, LLC d/b/a Brazos Licensing and Development ("Brazos" or "Plaintiff"), by and through its attorneys, files this Complaint for Patent Infringement against Defendants Huawei Investment & Holding Co., Ltd., Huawei Technologies Co., Ltd., Huawei Technologies USA Inc., Huawei Device Co. Ltd. (f/k/a Huawei Device (Dongguan) Co.), Huawei Device (Shenzhen) Co., Ltd. (f/k/a Huawei Device Co., Ltd.), and Huawei Device USA, Inc. (collectively "Huawei" or "Defendants") and alleges:

NATURE OF THE ACTION

1. This is a civil action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. §§ 1, et seq., including §§ 271, 281, 284, and 285.

THE PARTIES

2. Brazos is a limited liability corporation organized and existing under the laws of Delaware, with its principal place of business at 605 Austin Ave, Ste 6, Waco, TX 76701.

3. On information and belief, Defendant Huawei Investment & Holding Co., Ltd. is a Chinese corporation that does business in Texas, directly or through intermediaries, with a principal place of business at Bantian, Longgang District, Shenzhen, 518129, People's Republic of China.

4. On information and belief, Defendant Huawei Technologies Co., Ltd. is a Chinese corporation that does business in Texas, directly or through intermediaries, with a principal place of business at Bantian, Longgang District, Shenzhen 518129, People's Republic of China.

5. Upon information and belief, Defendant Huawei Technologies USA Inc. is a corporation organized and existing under the laws of Texas that maintains an established place of business at 2391 NE Interstate 410 Loop, San Antonio, TX 78217. Huawei Technologies USA, Inc. is authorized to do business in Texas and may be served via its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

6. Upon information and belief, Defendant Huawei Device Co. Ltd. (formerly known as Huawei Device (Dongguan) Co.) is a Chinese corporation that does business in Texas, directly or through intermediaries, and maintains a principal place of business in No.2 of Xincheng Road, Songshan Lake Zone, Dongguan, Guangdong 523808, People's Republic of China.

7. Upon information and belief, Huawei Device (Shenzhen) Co., Ltd. (formerly known as Huawei Device Co., Ltd.) is a wholly-owned subsidiary of Defendant Huawei

Device Co. Ltd. is a Chinese corporation that does business in Texas, directly or through intermediaries, and maintains a principal place of business in Bantian, Longgang District, Shenzhen 518129, People's Republic of China.

8. On information and belief, Defendant Huawei Device USA, Inc., is a Texas corporation with a principal place of business located at 5700 Tennyson Parkway, Suite 600, Plano, Texas 75024. Huawei Device USA, Inc. is authorized to do business in Texas and may be served via its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

9. All of the Defendants operate under and identify with the trade name "Huawei." Each of the Defendants may be referred to individually as a "Huawei Defendant" and, collectively, Defendants may be referred to below as "Huawei" or as the "Huawei Defendants." Upon information and belief, Defendant Huawei Investment & Holding Co., Ltd. provides consolidated financial reporting for Huawei entities, including all Huawei Defendants.

JURISDICTION AND VENUE

10. This is an action for patent infringement which arises under the Patent Laws of the United States, in particular, 35 U.S.C. §§271, 281, 284, and 285.

11. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a).

12. This Court has specific and general personal jurisdiction over each Huawei Defendant pursuant to due process and/or the Texas Long Arm Statute, because each Huawei Defendant has committed acts giving rise to this action within Texas and within this judicial district. The Court's exercise of jurisdiction over each Huawei Defendant would not offend traditional notions of fair play and substantial justice because Huawei has established

minimum contacts with the forum. For example, on information and belief, Huawei Defendants have committed acts of infringement in this judicial district, by among other things, selling and offering for sale products that infringe the asserted patent, directly or through intermediaries, as alleged herein.

13. Venue in the Western District of Texas is proper pursuant to 28 U.S.C. §§1391 and 1400(b) because Huawei Technologies USA Inc. and Huawei Device USA Inc. have committed acts of infringement in this judicial district and have a regular and established places of business in this judicial district and in Texas. As non-limiting examples, on information and belief, Huawei Technologies USA Inc. and Huawei Device USA Inc. have sold or offered to sell the Accused Products in this judicial district and have employees or agents that operate Huawei equipment in this judicial district, including at 189 CR 265, Georgetown, TX 78626, 1150 S Bell Blvd, Cedar Park, TX 78613, 1399 S A W Grimes Blvd, Round Rock, TX 78664, 12335 IH 35, Jarrell, TX 76537, 1050 Rabbit Hill Rd, Unit #E, Georgetown, TX 78626, 1602 A W Grimes Blvd, Round Rock, TX 78664, 4120 IH 35 N, Georgetown, TX 78626, 900 CR 272, Leander, TX 78641, 1950 Crystal Falls Pkwy, Leander, TX 78641, 1101 N Industrial Blvd, Round Rock, TX 78681, 506 McNeil Rd, Round Rock, TX 78681, 3210 Chisholm Trail Rd, Round Rock, TX 78681, 112 Roundville Ln, Round Rock, TX 78664, 202 Central Dr W, Georgetown, TX 78628, 3595 E Hwy 29, Georgetown, TX 78626, 1402 W Welch St, Taylor, TX 76574, 3801 Oak Ridge Dr, Round Rock, TX 78681, 1957 Red Bud Ln #B, Round Rock, TX 78664, 6603 S Lakewood Dr, Georgetown, TX 78633, 500 W Front, Hutto, TX 78634.

COUNT ONE - INFRINGEMENT OF U.S. PATENT NO. 8,417,112

14. Brazos re-alleges and incorporates by reference the preceding paragraphs of this Complaint.

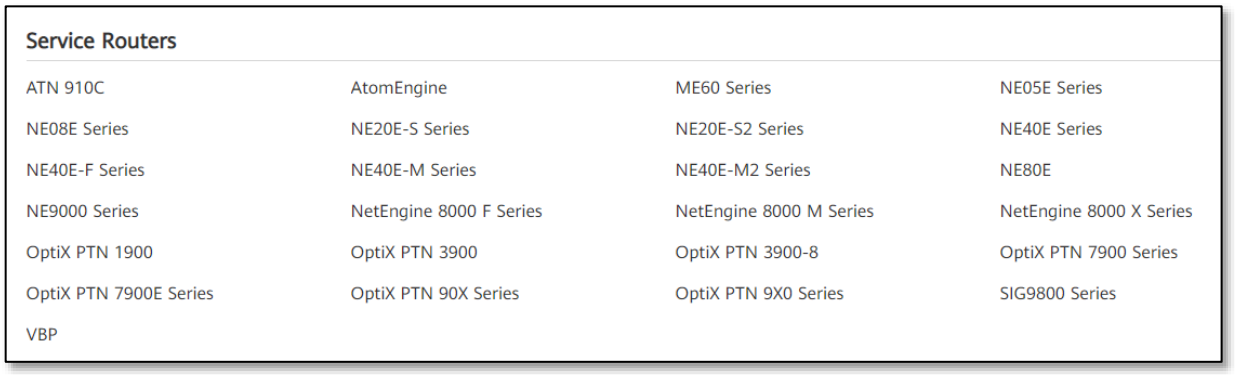
15. On April 9, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,417,112 ("the '712 Patent"), entitled "112." A true and correct copy of the '712 Patent is attached as Exhibit A to this Complaint.

16. Brazos is the owner of all rights, title, and interest in and to the '712 Patent, including the right to assert all causes of action arising under the '712 Patent and the right to any remedies for the infringement of the '712 Patent.

17. Huawei makes, uses, sells, offers for sale, imports, and/or distributes in the United States, including within this judicial district, products such as, but not limited to, Huawei service routers (collectively, the "Accused Products").

18. The Accused Products include, but are not limited to OptiX PTN 3900 and 1900 series routers.

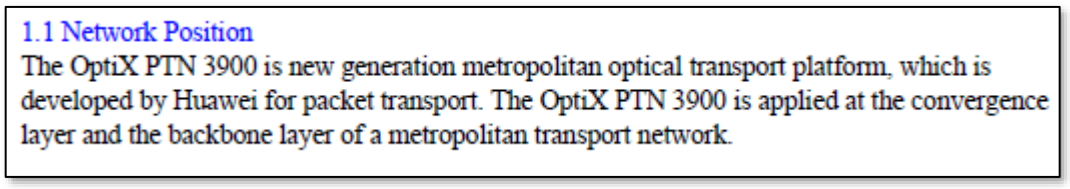
19. Huawei provides several service routers such as OptiX PTN 3900, OptiX PTN 1900, etc.



https://support.huawei.com/enterprise/us/category/routers-pid-1482607112869?submodel=16533

20. Huawei OptiX PTN 3900 is a new generation metropolitan optical transport platform, which is developed by Huawei for packet transport. The OptiX PTN 3900 is applied

at the convergence layer and the backbone layer of a metropolitan transport network.

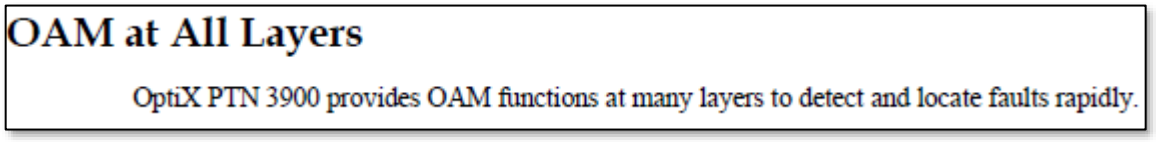


1.1 Network Position

The OptiX PTN 3900 is new generation metropolitan optical transport platform, which is developed by Huawei for packet transport. The OptiX PTN 3900 is applied at the convergence layer and the backbone layer of a metropolitan transport network.

https://support.huawei.com/enterprise/us/doc/EDOC1000100103

21. The Accused Products provides OAM functions at many layers to detect and locate faults rapidly.

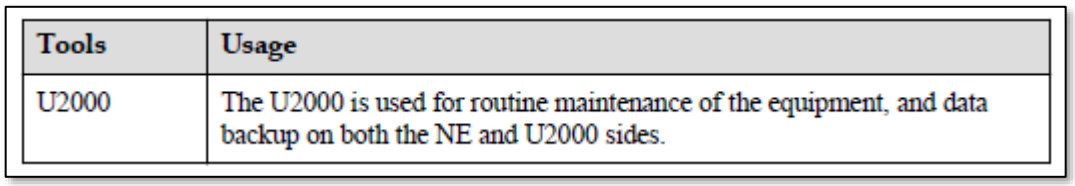


OAM at All Layers

OptiX PTN 3900 provides OAM functions at many layers to detect and locate faults rapidly.

https://support.huawei.com/enterprise/us/doc/EDOC1000100103

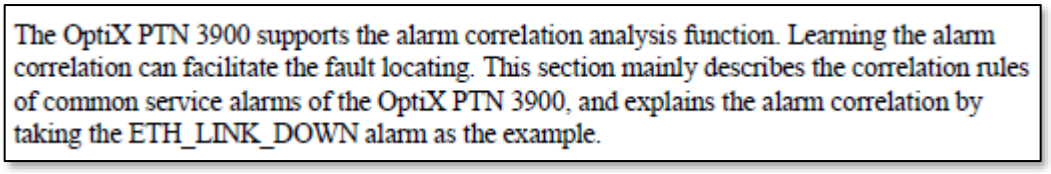
22. To ensure the stable and long-term running of the PTN equipment, the PTN equipment should be periodically maintained. Routine maintenance includes the remote maintenance (on the U2000), on-site maintenance, and spare parts maintenance.



Tools	Usage
U2000	The U2000 is used for routine maintenance of the equipment, and data backup on both the NE and U2000 sides.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

23. The accused instrumentality supports the alarm correlation analysis function that helps in locating the faults.

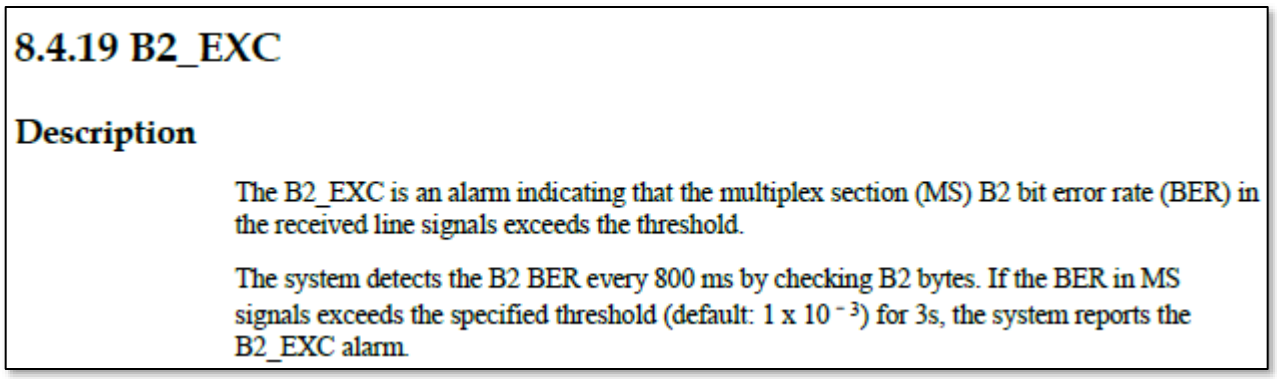


The OptiX PTN 3900 supports the alarm correlation analysis function. Learning the alarm correlation can facilitate the fault locating. This section mainly describes the correlation rules of common service alarms of the OptiX PTN 3900, and explains the alarm correlation by taking the ETH_LINK_DOWN alarm as the example.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

24. There are several types of alarms such as B2_EXC, B2_SD that are based on the monitored parameters. These alarms are triggered based on the B2 bit error rate (BER). The alarms are logically defined and trigger on their corresponding BER threshold values. For example, the system continuously monitors B2 BER of multiplex section. Initially, B2_SD alarm is triggered based on corresponding threshold BER value for B2_SD alarm and then if the BER value further increases (i.e., worsens over time) B2_EXC alarm is triggered.

25. B2_EXC is an alarm indicating that the multiplex section (MS) B2 BER in the received line signals exceeds some predefined threshold. The system continuously detects B2 BER every 800ms (i.e., the accused instrumentality stores plurality of BER values) and if the BER in MS signals exceeds the specified threshold for 3 sec (i.e., the accused instrumentality analyzes the BER values for BER degradation), the system reports the B2_EXC alarm.



8.4.19 B2_EXC

Description

The B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1×10^{-3}) for 3s, the system reports the B2_EXC alarm.

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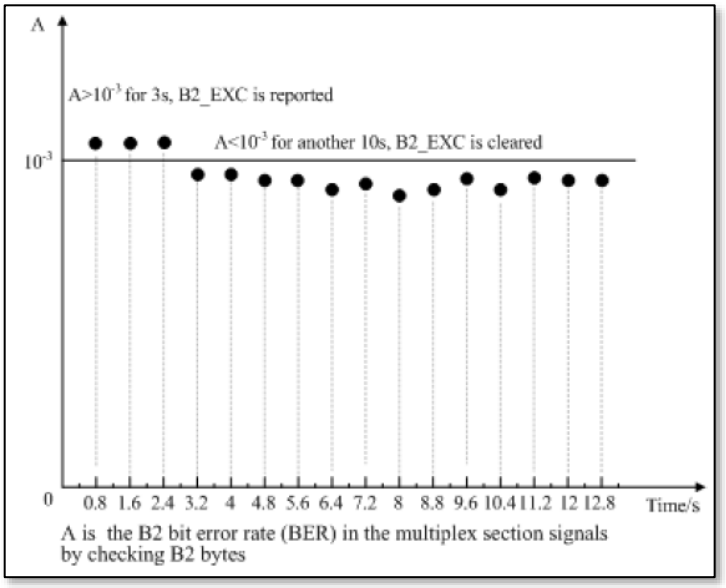

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

26. When the B2_EXC alarm occurs, it indicates that the carried services are severely degraded. Also, if the linear MSP is configured, the B2_EXC alarm triggers protection switching.

Impact on the System

- When the B2_EXC alarm occurs, the carried services are severely degraded. If the linear MSP is configured, the B2_EXC alarm triggers protection switching.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

27. B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold. The system continuously detects B2 BER every 800ms and if the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3 sec (i.e., the accused instrumentality compares the detected BER values to predetermined BER threshold levels), the system reports the B2_EXC alarm. Further, if the BER in MS signals is restored to normal and stays lower than the specified threshold for another 10 sec, the system clears the B2_EXC alarm.

8.4.19 B2_EXC

Description

The B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3s, the system reports the B2_EXC alarm.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals is restored to normal and stays lower than the specified threshold for another 10s, the system clears the B2_EXC alarm.

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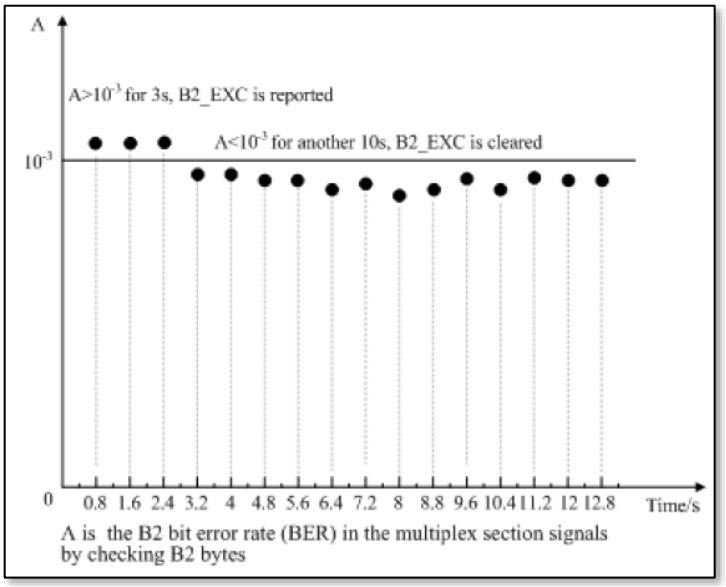

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

28. B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold. The system continuously detects B2 BER every 800ms and if the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3 sec (i.e., the accused instrumentality compares the collected BER values to predetermined BER threshold level), the system reports the B2_EXC alarm. Further, if the

BER in MS signals is restored to normal and stays lower than the specified threshold for another 10 sec, the system clears the B2_EXC alarm.

8.4.19 B2_EXC

Description

The B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1×10^{-3}) for 3s, the system reports the B2_EXC alarm.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals is restored to normal and stays lower than the specified threshold for another 10s, the system clears the B2_EXC alarm.

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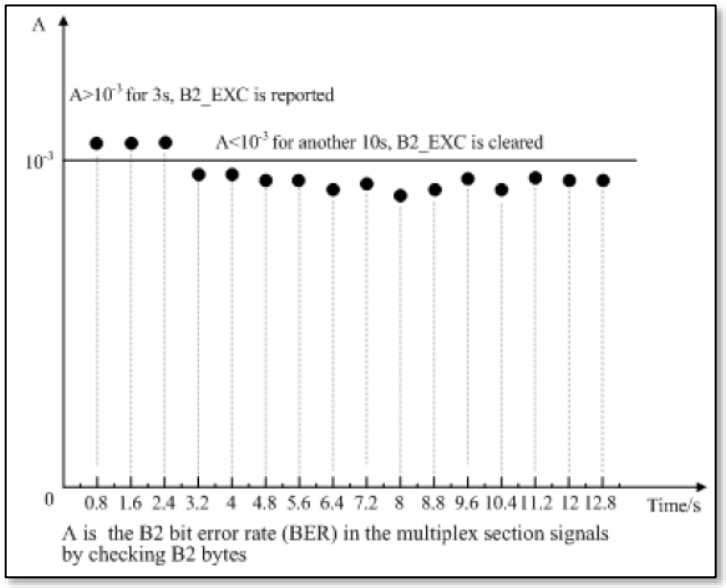

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

29. The B2_SD is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received signals on the alarm-indicated line is degraded. The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1×10^{-6}) for 3s, the system reports the B2_SD alarm.

8.4.20 B2_SD

Description

The B2_SD is an alarm indicating that multiplex section (MS) B2 bit error rate (BER) in the received signals on the alarm-indicated line are degraded.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-6}) for 3s, the system reports the B2_SD alarm.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals is restored to normal and stays lower than the specified threshold for another 10s, the system clears the B2_SD alarm.

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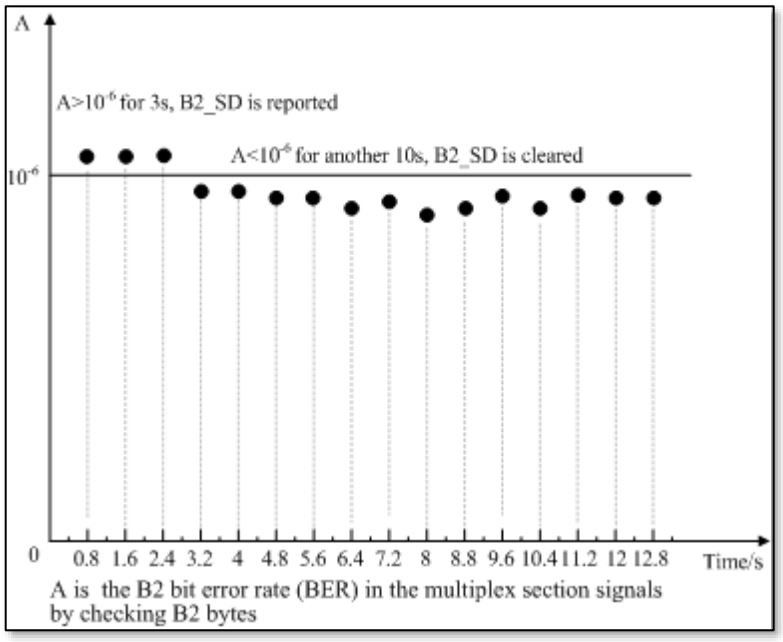

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

30. If the B2 BER increases, then B2_EXC alarm is triggered. B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the predefined threshold. The system continuously detects B2 BER every 800ms and if the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3 sec, the system reports the B2_EXC alarm.

8.4.19 B2_EXC

Description

The B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3s, the system reports the B2_EXC alarm.

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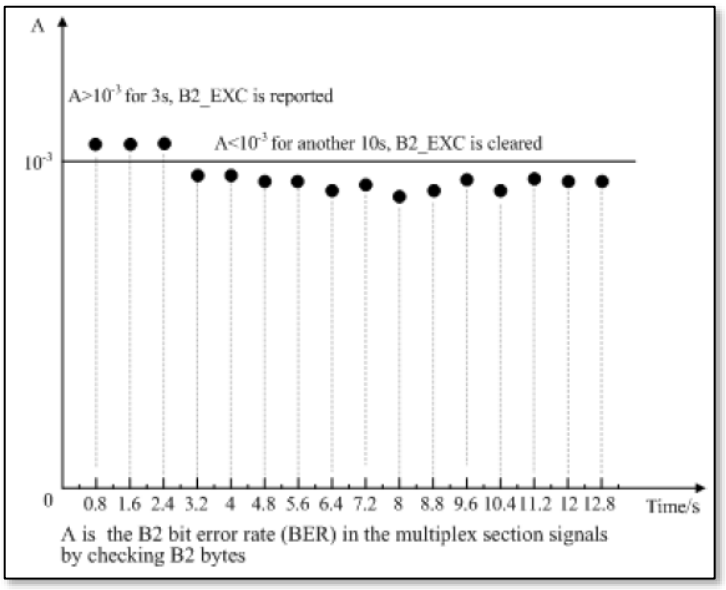


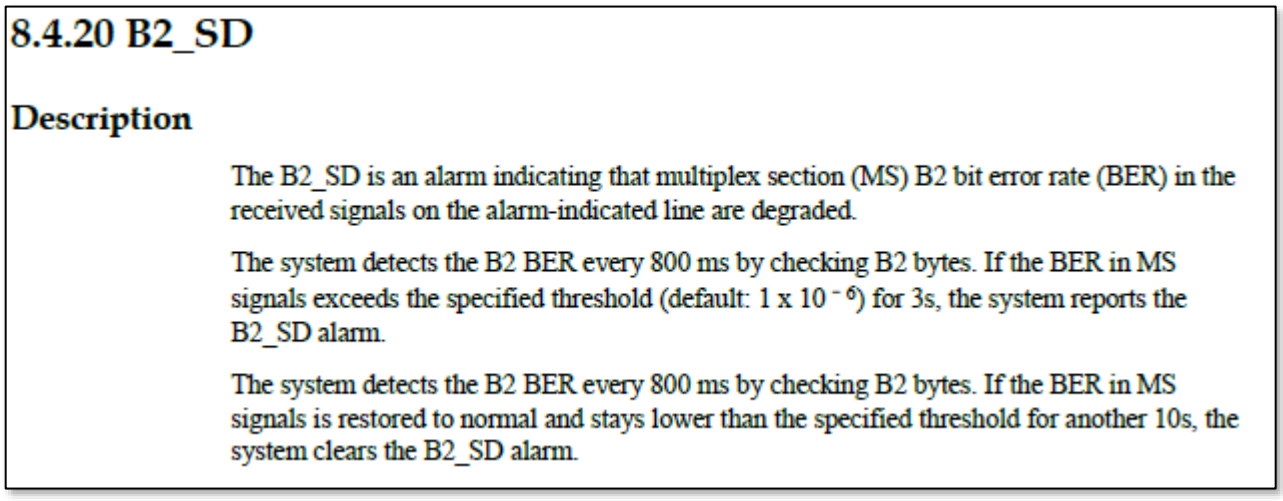
https://support.huawei.com/enterprise/us/doc/EDOC1000096390

31. The accused instrumentality continuously monitors the B2 BER and based on the BER values, either B2_SD or B2_EXC alarm is triggered. B2_SD alarm is triggered at a lower BER threshold (here, default: 1 x 10^{-6}) and the B2_EXC alarm is triggered at a higher BER threshold (here, default: 1 x 10^{-3}). Accordingly, if the BER value worsens over time, the accused instrumentality changes the alarm from B2_SD to B2_EXC or in other words the B2_SD alarm will be suppressed when the B2_EXC alarm occurs.

- The B2_SD alarm will be suppressed when the B2_EXC alarm occurs.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

32. B2_SD is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received signals on the alarm-indicated line is degraded. The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-6}) for 3s, the system reports the B2_SD alarm. S



8.4.20 B2_SD

Description

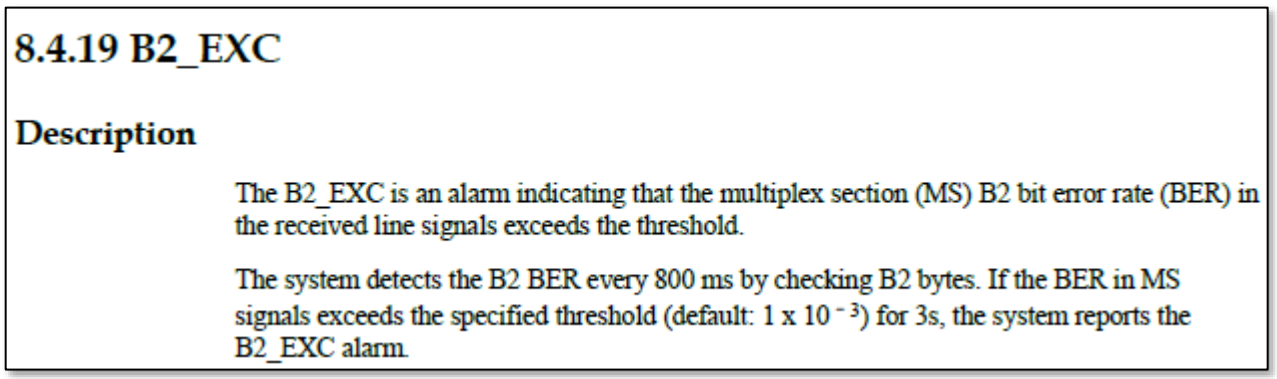
The B2_SD is an alarm indicating that multiplex section (MS) B2 bit error rate (BER) in the received signals on the alarm-indicated line are degraded.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-6}) for 3s, the system reports the B2_SD alarm.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals is restored to normal and stays lower than the specified threshold for another 10s, the system clears the B2_SD alarm.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

33. Similarly, B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold. The system continuously detects B2 BER every 800ms and if the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3 sec, the system reports the B2_EXC alarm.



8.4.19 B2_EXC

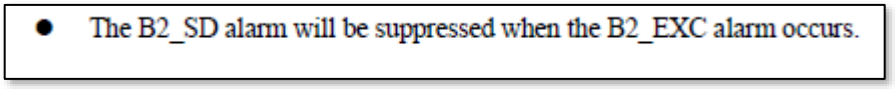
Description

The B2_EXC is an alarm indicating that the multiplex section (MS) B2 bit error rate (BER) in the received line signals exceeds the threshold.

The system detects the B2 BER every 800 ms by checking B2 bytes. If the BER in MS signals exceeds the specified threshold (default: 1 x 10^{-3}) for 3s, the system reports the B2_EXC alarm.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

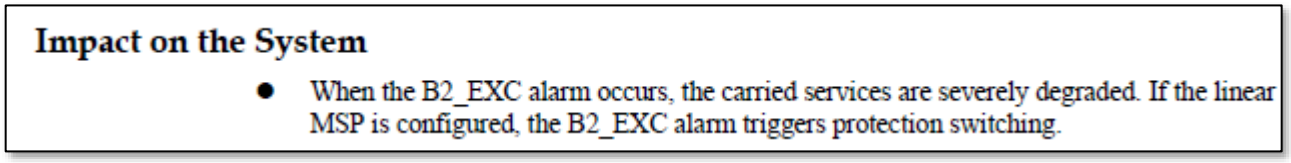
34. The accused instrumentality continuously monitors the B2 BER and based on the BER values, either B2_SD or B2_EXC alarm is triggered. B2_SD alarm is generated at a lower BER threshold (here, default: 1 x 10^{-6}) and the B2_EXC alarm is generated at a higher BER threshold (here, default: 1 x 10^{-3}). As the BER value worsens over time, the accused instrumentality changes the alarm from B2_SD to B2_EXC which shows an indication of BER degradation.



- The B2_SD alarm will be suppressed when the B2_EXC alarm occurs.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

35. When the B2_EXC alarm is triggered, it indicates that the carried services are severely degraded. If the linear MSP is configured, the B2_EXC alarm triggers protection switching.

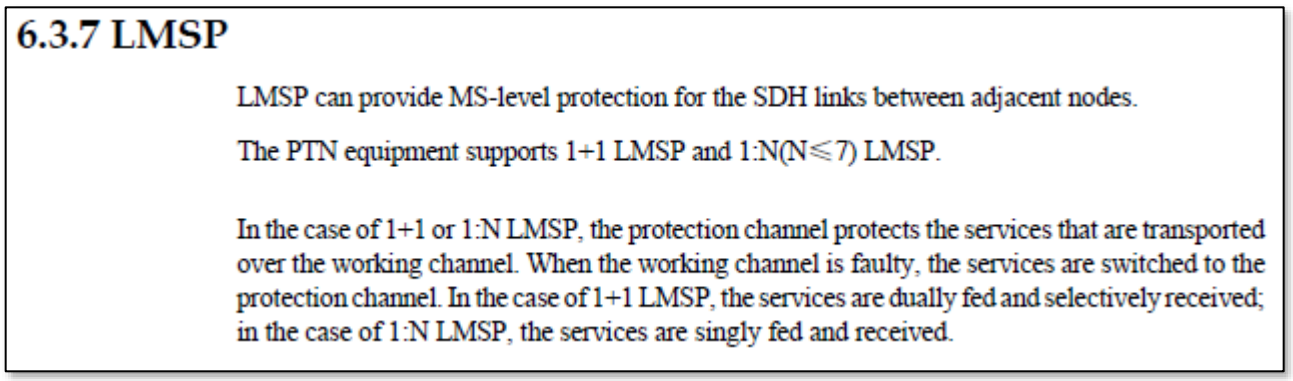


Impact on the System

- When the B2_EXC alarm occurs, the carried services are severely degraded. If the linear MSP is configured, the B2_EXC alarm triggers protection switching.

https://support.huawei.com/enterprise/us/doc/EDOC1000096390

36. The accused instrumentality equipment supports 1+1 Linear Multiplex Section Protection (LMSP) and 1:N LMSP. When the working channel is faulty (i.e., in case of BER degradation), the services are switched to the protection channel (i.e., switching a transmission port).



6.3.7 LMSP

LMSP can provide MS-level protection for the SDH links between adjacent nodes.

The PTN equipment supports 1+1 LMSP and 1:N(N≤7) LMSP.

In the case of 1+1 or 1:N LMSP, the protection channel protects the services that are transported over the working channel. When the working channel is faulty, the services are switched to the protection channel. In the case of 1+1 LMSP, the services are dually fed and selectively received; in the case of 1:N LMSP, the services are singly fed and received.

https://support.huawei.com/enterprise/us/doc/EDOC1000100103

37. In view of preceding paragraphs, each and every element of at least claim 1 of the ’712 Patent is found in the Accused Products.

38. Huawei has and continues to directly infringe at least one claim of the ’712 Patent, literally or under the doctrine of equivalents, by making, using, selling, offering for sale, importing, and/or distributing the Accused Products in the United States, including within this judicial district, without the authority of Brazos.

39. Huawei has received notice and actual or constructive knowledge of the ’712 Patent since at least the date of service of this Complaint.

40. Since at least the date of service of this Complaint, through its actions, Huawei has actively induced product makers, distributors, retailers, and/or end users of the Accused Products to infringe the ’712 Patent throughout the United States, including within this judicial district, by, among other things, advertising and promoting the use of the Accused Products in various websites, including providing and disseminating product descriptions, operating manuals, and other instructions on how to implement and configure the Accused Products. Examples of such advertising, promoting, and/or instructing include the documents at:

- https://support.huawei.com/enterprise/us/category/routers-pid-

1482607112869?submodel=16533

- https://support.huawei.com/enterprise/us/doc/EDOC1000100103
- https://support.huawei.com/enterprise/us/doc/EDOC1000096390

41. Since at least the date of service of this Complaint, through its actions, Huawei has contributed to the infringement of the '712 Patent by having others sell, offer for sale, or use the Accused Products throughout the United States, including within this judicial district, with knowledge that the Accused Products infringe the '712 Patent. The Accused Products are especially made or adapted for infringing the '712 Patent and have no substantial non-infringing use. For example, in view of the preceding paragraphs, the Accused Products contain functionality which is material to at least one claim of the '712 Patent.

JURY DEMAND

Brazos hereby demands a jury on all issues so triable.

REQUEST FOR RELIEF

WHEREFORE, Brazos respectfully requests that the Court:

(A) Enter judgment that Huawei infringes one or more claims of the '712 Patent literally and/or under the doctrine of equivalents;

(B) Enter judgment that Huawei has induced infringement and continues to induce infringement of one or more claims of the '712 Patent;

(C) Enter judgment that Huawei has contributed to and continues to contribute to the infringement of one or more claims of the '712 Patent;

(D) Award Brazos damages, to be paid by Huawei in an amount adequate to compensate Brazos for such damages, together with pre-judgment and post-judgment interest for the infringement by Huawei of the '712 Patent through the date such judgment

is entered in accordance with 35 U.S.C. §284, and increase such award by up to three times the amount found or assessed in accordance with 35 U.S.C. §284;

(E) Declare this case exceptional pursuant to 35 U.S.C. §285; and

(F) Award Brazos its costs, disbursements, attorneys' fees, and such further and additional relief as is deemed appropriate by this Court.

Dated: March 20, 2020

Respectfully submitted,

/s/ James L. Etheridge

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