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ITU-T Rec. (*)



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ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)
ITU-T:G.989.3, G.989.3 (2015) Amd. 1

(*)Number

(*)Title

G.989.3: 40-Gigabit-capable passive optical networks (NG-PON2):
Transmission convergence layer specification
G.989.3 (2015) Amd. 1: 40-Gigabit-capable passive optical networks (NG-PON2): Transmission convergence layer specification Amendment

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Patent Information (desired but not required for options 1 and 2; required in ITU, ISO and IEC for option 3 (NOTE))				
No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
1	Granted	CN	CN101998193B	Key protection method and system for passive optical network
2	Granted	CN	CN103248417B	Method and device for allocating identify labels in passive optical network
3	Granted	CN	CN104518840B	A kind of method of wavelength calibration, optical network unit and optical line terminal
4	Granted	CN	CN109286580B	Uplink bandwidth allocation method and device for passive optical network
5	Granted	CN	CN108574532B	Optical signal power control method and device and optical line terminal
6	Pending	EP	EP18766962.7	Optical signal power control method and device and optical line terminal
7	Granted	CN	CN108540221B	Data sending method and device
8	Granted	US	US11418261	Data sending method and device
9	Granted	CN	CN109495797B	ONU management method, OLT and system in passive optical network
10	Granted	US	US11026002	ONU management method, OLT and system in passive optical network
11	Granted	CN	CN109429118B	Bandwidth allocation method, device and system
12	Granted	CN	CN109428837B	Data transmission method and device
13	Granted	US	US11805339	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
14	Granted	US	US11405704	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
15	Granted	CN	CN109756796B	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
16	Pending	EP	EP18874268.8	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
17	Pending	CN	CN202210641431.0	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
18	Granted	CN	CN109787709B	Passive optical network, and encoding and decoding determining method and device
19	Granted	CN	CN109756292B	Passive optical network system, data transmission method and device
20	Pending	EP	EP18874390.0	Passive optical network system, data transmission method and device
21	Pending	CN	CN202211508695.5	Passive optical network system, data transmission method and device
22	Granted	EP	EP2962474	CHANNEL MAP FOR OPTICAL NETWORK UNIT ACTIVATION AND ROGUE BEHAVIOR PREVENTION

Patent Information (desired but not required for options 1 and 2; required in ITU, ISO and IEC for option 3 (NOTE))				
No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
23	Granted	CN	CN105191340B	CHANNEL MAP FOR OPTICAL NETWORK UNIT ACTIVATION AND ROGUE BEHAVIOR PREVENTION
24	Granted	US	US10063411	CHANNEL MAP FOR OPTICAL NETWORK UNIT ACTIVATION AND ROGUE BEHAVIOR PREVENTION
25	Granted	EP	EP2997684	USING NOISY WINDOW FOR UNCALIBRATED OPTICAL NETWORK UNIT ACTIVATION
26	Granted	US	US10003428	USING NOISY WINDOW FOR UNCALIBRATED OPTICAL NETWORK UNIT ACTIVATION
27	Granted	CN	CN105359441B	USING NOISY WINDOW FOR UNCALIBRATED OPTICAL NETWORK UNIT ACTIVATION
28	Granted	CN	CN103166697B	EQUALIZATION DELAY AGNOSTIC PROTECTION SWITCHING IN PROTECTED PASSIVE OPTICAL NETWORKS
29	Granted	US	US9025949	EQUALIZATION DELAY AGNOSTIC PROTECTION SWITCHING IN PROTECTED PASSIVE OPTICAL NETWORKS
30	Granted	US	US9497076	DUAL-STACK SUPPORT FOR DEMARC AUTO CONFIGURATION (DAC) MECHANISM IN DOCSIS PROVISIONING OF EPON (DPOE) NETWORK
31	Granted	CN	CN103313149B	DUAL-STACK SUPPORT FOR DEMARC AUTO CONFIGURATION (DAC) MECHANISM IN DOCSIS PROVISIONING OF EPON (DPOE) NETWORK
32	Granted	CN	CN104769890B	10 gigabit per second capable passive optical network system with flexible nominal upstream bitrate
33	Granted	US	US9749078	10 gigabit per second capable passive optical network system with flexible nominal upstream bitrate
34	Granted	CN	CN101989888B	Indicating method and system for opening/closing forward error correction coding (FEC) function
35	Granted	CN	CN101729934B	Method and system for allotting uplink bandwidth
36	Granted	CN	CN101778313B	A kind of method reporting in time for realizing optical network unit
37	Granted	CN	CN102065344B	Data transmission method and Gbit passive optical network system
38	Granted	EP	EP2498451	Data transmission method and Gbit passive optical network system
39	Granted	US	US8909044	Data transmission method and Gbit passive optical network system
40	Granted	CN	CN101873166B	A kind of distance-finding method of Gbit passive optical network system
41	Granted	CN	CN101873516B	Method for registering and activating optical network unit in a gigabit passive optical network system

Patent Information (desired but not required for options 1 and 2; required in ITU, ISO and IEC for option 3 (NOTE))				
No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
42	Granted	EP	EP2439956	Transmission method, assembling method and transmission device for physical layer operations, administration and maintenance, ploam, message in a passive optical network
43	Granted	CN	CN101998183B	Transmission method, assembling method and transmission device for physical layer operations, administration and maintenance, ploam, message in a passive optical network
44	Granted	US	US8619591	Transmission method, assembling method and transmission device for physical layer operations, administration and maintenance, ploam, message in a passive optical network
45	Granted	EP	EP2536039	Method and system for uplink bandwidth allocation in a passive optical network
46	Granted	CN	CN102158770B	Method and system for uplink bandwidth allocation in a passive optical network
47	Granted	US	US8934772	Method and system for uplink bandwidth allocation in a passive optical network
48	Granted	CN	CN102480651B	Multi-rate optical signal transmission method, multi-rate optical signal transmission system and optical network unit
49	Granted	CN	CN102833640B	A kind of transmission method and device of parameter granularity
50	Granted	CN	CN102223586B	Registration activation method and system for optical network unit
51	Granted	CN	CN102594444B	A kind of method and system realizing full protection modes
52	Granted	CN	CN103220044B	A kind of optical access network system, Apparatus and method for
53	Granted	CN	CN103220588B	A kind of register method of optical network unit and system
54	Granted	CN	CN103051984B	Optical signal transmission method and device
55	Granted	EP	EP2768160	Method and apparatus for processing uplink data abnormality
56	Granted	CN	CN103051983B	Method and apparatus for processing uplink data abnormality
57	Granted	CN	CN103378918B	Channel method of adjustment and device
58	Granted	CN	CN103391486B	A kind of method and optical line terminal and optical network unit for carrying out wavelength adjustment
59	Granted	CN	CN103840960B	A kind of business collocation method and system of passive optical network
60	Granted	CN	CN103856836B	The method of sending and receiving of user data and system, equipment in passive optical network
61	Granted	EP	EP3107306	Wavelength adjustment method and device for optical line terminal/optical network unit
62	Granted	KR	KR102156959	Wavelength adjustment method and device for optical line terminal/optical network unit

Patent Information (desired but not required for options 1 and 2; required in ITU, ISO and IEC for option 3 (NOTE))

No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
63	Granted	US	US10455302	Wavelength adjustment method and device for optical line terminal/optical network unit
64	Granted	CN	CN104837077B	Wavelength adjustment method and device for optical line terminal/optical network unit
65	Granted	JP	JP6400111	Wavelength adjustment method and device for optical line terminal/optical network unit
66	Granted	CN	CN105577265B	Calibration method of uplink wavelength channel of passive optical network system and optical network unit
67	Granted	EP	EP4167589	Working channel tuning methods, devices and system
68	Granted	EP	EP3217683	Working channel tuning methods, devices and system
69	Granted	CN	CN105592373B	Working channel tuning methods, devices and system
70	Granted	US	US10390117	Working channel tuning methods, devices and system
<div><input type="checkbox"/></div> <div>Check here if additional patent information is provided on additional pages.</div>				

NOTE: For option 3, the additional minimum information that shall also be provided is listed in the option 3 box above.

Signature (include on final page only):

Patent Holder ZTE Corporation

Name of authorized person CHEN Guanglei

Title of authorized person IPR Director

Signature CHEN Guanglei

Place, Date XI AN, China March 26, 2025

FORM version: 2 November 2018