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General Secretary
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3 rue de Varembé
CH-1211 Geneva 20
Switzerland
Fax: +41 22 919 0300
Email:
inmail@iec.ch

Patent Holder:

Legal Name ZTE Corporation

Contact for license application:

Name & Department CHEN Guanglei, Intellectual Property Department

Address 21/F, No.55, Hi-tech Road South, Nanshan District, Shenzhen, 518057, P. R. China

Tel. 86 -029-83636669

Fax

E-mail chen.guanglei2@zte.com.cn

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ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)
ITU-T: G.9804.2, G.9804.2 Amd1

(*)Number

(*)Title

G.9804.2: Higher speed passive optical networks - Common transmission convergence layer specification

G.9804.2 Amd1: Higher speed passive optical networks - Common transmission convergence layer specification Amendment 1

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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	CN106488345B	Data transmission method, device and system, ONU (optical network Unit) and OLT (optical line terminal)
3	Granted	EP	EP3399766	Method and apparatus for realizing optical network unit activation
4	Granted	CN	CN106937184B	A method and device for realizing activation
5	Granted	US	US10547921	Method and apparatus for realizing optical network unit activation
6	Pending	EP	EP24165164.5	Method and apparatus for realizing optical network unit activation
7	Granted	US	US10530517	Channel adjustment method, apparatus and system
8	Granted	CN	CN107317647B	Channel adjustment method, apparatus and system
9	Granted	EP	EP3541088	Method, device and system for bearing a frame sequence number in a multichannel passive optical network
10	Granted	CN	CN108574530B	Data sending, receiving method and device and multichannel EPON system
11	Granted	CN	CN108063985B	Method and device for sending and receiving data
12	Granted	US	US10798472	Method and device for sending and receiving data
13	Granted	EP	EP3598772	Pon channel establishment method
14	Granted	US	US11051090	Pon channel establishment method, onu, olt and system
15	Granted	CN	CN108574888B	Pon channel establishment method, onu, olt and system
16	Pending	EP	EP24202162.4	Pon channel establishment method, onu, olt and system
17	Granted	CN	CN110213679B	Passive optical network system and implementation method thereof
18	Granted	US	US10798473	Passive optical network system and implementation method thereof
19	Granted	CN	CN108156538B	Passive optical network system and implementation method thereof
20	Granted	CN	CN108023835B	Data sending and receiving method and device, onu, and olt
21	Granted	EP	EP3537673	Data sending and receiving method and device, onu, and olt
22	Granted	CN	CN109286580B	Uplink bandwidth allocation method and device for passive optical network
23	Granted	CN	CN108574532B	Optical signal power control method and device and optical line terminal
24	Pending	EP	EP18766962.7	Optical signal power control method and device and optical line terminal

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
25	Granted	CN	CN108540221B	Data transmission method and device
26	Granted	US	US11418261	Data transmission method and device
27	Granted	CN	CN109495797B	Method for managing onu in passive optical network, olt and system
28	Granted	US	US11026002	Method for managing onu in passive optical network, olt and system
29	Granted	CN	CN109429118B	Bandwidth allocation method, device and system
30	Granted	CN	CN109428837B	Data transmission method and device
31	Granted	US	US11805339	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
32	Granted	US	US11405704	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
33	Granted	CN	CN109756796B	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
34	Pending	EP	EP18874268.8	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
35	Pending	CN	CN202210641431.0	DOWNLINK BANDWIDTH TRANSMISSION METHOD AND APPARATUS FOR PASSIVE OPTICAL NETWORK
36	Granted	US	US11916669	CODING CONTROL METHOD AND APPARATUS IN A PASSIVE OPTICAL NETWORK, COMMUNICATION DEVICE AND STORAGE MEDIUM
37	Granted	US	US11469853	CODING CONTROL METHOD AND APPARATUS IN A PASSIVE OPTICAL NETWORK, COMMUNICATION DEVICE AND STORAGE MEDIUM
38	Granted	CN	CN109787709B	Passive optical network, and encoding and decoding determining method and device
39	Granted	CN	CN110198498B	Switch control method, device, equipment and storage medium
40	Granted	CN	CN109756292B	Passive optical network system, data transmission method and device
41	Pending	EP	EP18874390.0	Passive optical network system, data transmission method and device
42	Pending	CN	CN202211508695.5	Passive optical network system, data transmission method and device
43	Granted	CN	CN110011755B	LDPC coding method and device and data sending method and device
44	Granted	CN	CN110011756B	Passive optical network coding processing method and device
45	Granted	US	US11889243	Method and Apparatus for Opening Quiet Window, and Registration Method, Apparatus and 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
46	Granted	US	US11272272	Method and Apparatus for Opening Quiet Window, and Registration Method, Apparatus and System
47	Pending	EP	EP19792791.6	Method and Apparatus for Opening Quiet Window, and Registration Method, Apparatus and System
48	Pending	CN	CN202311128510.2	Method and Apparatus for Opening Quiet Window, and Registration Method, Apparatus and System
49	Granted	EP	EP3860002	Ranging method for optical network, olt, onu, and optical network system
50	Granted	CN	CN110943783B	Ranging method for optical network, olt, onu, and optical network system
51	Granted	US	US11329720	Ranging Method for Optical Network, OLT, ONU, and Optical Network System
52	Granted	US	US11425475	Ranging Method and Registration Method for Optical Network, OLT, ONU, and Optical Network System
53	Granted	CN	CN110944248B	Registration Method for Optical Network, OLT, ONU, and Optical Network System
54	Pending	EP	EP19865817.1	Ranging Method and Registration Method for Optical Network, OLT, ONU, and Optical Network System
55	Granted	CN	CN110944249B	Ranging method and communication method for optical network, olt, onu, and optical network system
56	Granted	US	US11425474	Ranging method and communication method for optical network, olt, onu, and optical network system
57	Pending	EP	EP19865931.0	Ranging method and communication method for optical network, olt, onu, and optical network system
58	Granted	CN	CN110768742B	OAM message transmission method, sending device, receiving device and readable storage medium
59	Pending	EP	EP19840985.6	OAM message transmission method, sending device, receiving device and readable storage medium
60	Granted	EP	EP3883257	Data communication and communication management method based on distributed processing unit (dpu) and dpu
61	Granted	CN	CN111193969B	Data communication and communication management method based on distributed processing unit (dpu) and dpu
62	Granted	CN	CN111586501B	Data transmission method and apparatus, ap, onu pon, networking and storage medium
63	Granted	US	US11743622	Data transmission method and apparatus, ap, onu pon, networking and storage medium
64	Pending	EP	EP20758432.7	Data transmission method and apparatus, ap, onu pon, networking and storage medium

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
65	Granted	CN	CN108768514B	Dynamic equalization of differential path loss in an optical distribution network
66	Granted	US	US10404399	Dynamic equalization of differential path loss in an optical distribution network
67	Granted	CN	CN111954100B	Interface upgrading method and device and optical network unit management method and device
68	Pending	EP	EP20809999.4	Interface upgrading method and device and optical network unit management method and device
69	Granted	EP	EP3985992	Wavelength switching and configuration methods and devices for passive optical network
70	Granted	US	US12028153	Wavelength switching and configuration method and device for passive optical network
71	Granted	CN	CN112104927B	Wavelength switching and configuration method and device for passive optical network
72	Granted	CN	CN112087678B	Bandwidth allocation and bandwidth checking method and device
73	Pending	EP	EP20822764.5	Bandwidth allocation and bandwidth checking method and device
74	Granted	US	US12120474	Activation method and device, control device, network device and optical network system
75	Granted	CN	CN112188324B	Activation method and device, control device, network device and optical network system
76	Pending	EP	EP20836152.7	Activation method and device, control device, network device and optical network system
77	Pending	US	US18828230	Activation method and device, control device, network device and optical network system
78	Granted	CN	CN112235661B	Optical network unit management method, device, system and storage medium
79	Pending	EP	EP20839902.2	Optical network unit management method, device, system and storage medium
80	Granted	CN	CN112637112B	Multi-channel data transmission method, assembly method, device, medium, and electronic device
81	Pending	EP	EP20873730.4	Multi-channel data transmission method, assembly method, device, medium, and electronic device
82	Pending	US	US17767893	Multi-channel data transmission method, assembly method, device, medium, and electronic device
83	Pending	CN	CN202410964674.7	Multi-channel downlink superframe transmission method, assembly method, device, medium, and electronic device

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
84	Granted	CN	CN101778313B	A kind of method reporting in time for realizing optical network unit
85	Granted	CN	CN102065344B	Method for data transmission and system for gigabit passive optical network
86	Granted	EP	EP2498451	Method for data transmission and system for gigabit passive optical network
87	Granted	US	US8909044	Method for transmitting data and gigabit-capable passive optical network system
88	Granted	CN	CN101873516B	Method for registering and activating optical network unit in a gigabit passive optical network system
89	Granted	EP	EP2439956	Transmission method, assembling method and transmission device for physical layer operations, administration and maintenance, ploam, message in a passive optical network
90	Granted	CN	CN101998183B	Transmission method, assembling method and transmission device for physical layer operations, administration and maintenance, ploam, message in a passive optical network
91	Granted	US	US8619591	Transmission Method and Assembling Method for Physical Layer Operations, Administration and Maintenance (PLOAM) Message in a Passive Optical Network
92	Granted	EP	EP2536039	Method and system for uplink bandwidth allocation in a passive optical network
93	Granted	CN	CN102158770B	Method and system for uplink bandwidth allocation in a passive optical network
94	Granted	US	US8934772	Method and system for upstream bandwidth allocation in a passive optical network
95	Granted	CN	CN103139105B	Uplink bandwidth allocation method in a kind of passive optical network and system
96	Granted	CN	CN103391486B	A kind of method and optical line terminal and optical network unit for carrying out wavelength adjustment
97	Granted	CN	CN103841474B	Wavelength tuning method, system and equipment in a kind of passive optical network
98	Granted	EP	EP3101825	Channel switching method and apparatus, optical network unit and time wavelength division multiplexing system
99	Granted	KR	KR102047586	Channel switching method and apparatus, optical network unit and time wavelength division multiplexing system
100	Granted	CN	CN104811238B	Channel switching method and apparatus, optical network unit and time wavelength division multiplexing system
101	Granted	US	US10027405	Method and Device for Channel Switching, Optical Network Unit, and Time Wavelength Division Multiplexing 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
102	Granted	JP	JP6360181	Channel switching method, apparatus, optical network unit, and time-wavelength division multiplexing system
☐ Check here if additional patent information is provided on additional pages.				

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	<u>ZTE Corporation</u>
Name of authorized person	<u>CHEN Guanglei</u>
Title of authorized person	<u>IPR Director</u>
Signature	<u>CHEN Guanglei</u>
Place, Date	<u>XI AN, China March 26, 2025</u>

FORM version: 2 November 2018