AI-9
PRODUCT MANUAL

www.signalfiresplicer.com

SIGNAL FIRE TECHNOLOGY CO., LTD.



OPTICAL FIBER FUSION SPLICER



NEW PRODUCT LAUNCH
CLASSIC MASTERPIECE

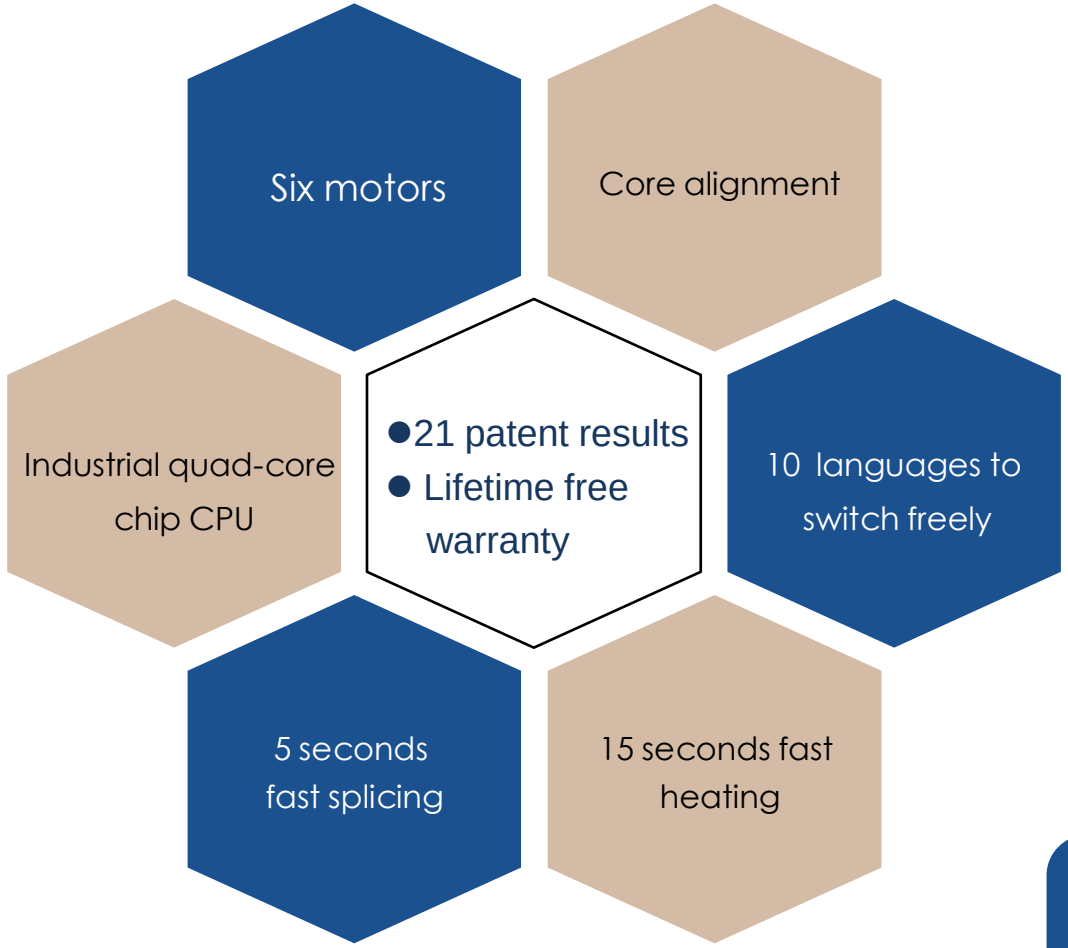
OPTICAL FIBER FUSION SPLICER



Signal Fire AI-9 use the latest core alignment technology with auto focus and six motors, it is a new generation of fiber fusion splicer. It is fully qualified with trunk construction of medium and short distance, FTTH project, security monitoring and other fiber cable splicing projects. The machine uses industrial quad-core CPU, fast response, is currently one of the fastest fiber splicing machine in the market; with 5-inch 800X480 high-resolution screen, the operation is simple and intuitively; and up to 300 times focus magnifications, making it is very easy to observe the fiber with naked eyes. 5 seconds speed core alignment splicing, 15 seconds heating, the working efficiency increased by 50% compared to ordinary splicing machines. Under the conditions of rigorous testing, the performance is still outstanding; toolbox is small, exquisite, durable, and with unique bench design. The design of operating platform reflects the humanistic care; unique lighting design, it is convenient for night construction or repair. Screen brightness is adjustable and it is convenient for outdoor sunshine environment operation. The core parts are using imported brands, aviation metal body material with exquisite details. With the combination of advanced technology and design, the new generation of optical fiber fusion splicer will bring you a reliable and comfortable user experience.

MASTERPIECE
HIGH-END LUXURY

OPTICAL FIBER FUSION SPLICER



● Once splicing reaches to 50,000 times free replacement a new machine

METAL BODY
AESTHETIC DETAILS





VFL: Always on / flashing / off

Power Meter:

850nm/1300nm/1310nm/1490nm /1550nm/1625nm Six states

BUILT-IN POWER METER AND VFL

Effectively measure connection loss, verify continuity, and help assess fiber link transmission quality.

10 LANGUAGES TO SWITCH FREELY

Covers the global major user market


CHINESE


ENGLISH


FRENCH


RUSSIAN


ITALIAN


PORTUGUESE

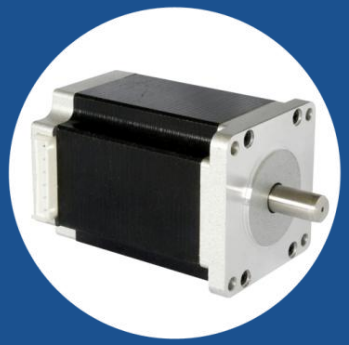

POLISH


SPANISH


THAI


ARABIC

CORE PARTS QUALITY ASSURANCE



Siemens stepper motor



Roth ROUST linear guide



Sanyo lithium battery



Aviation metal material

THE TOOLBOX

COMES WITH A STOOL TO FACILITATE THE CONSTRUCTION WORKERS.

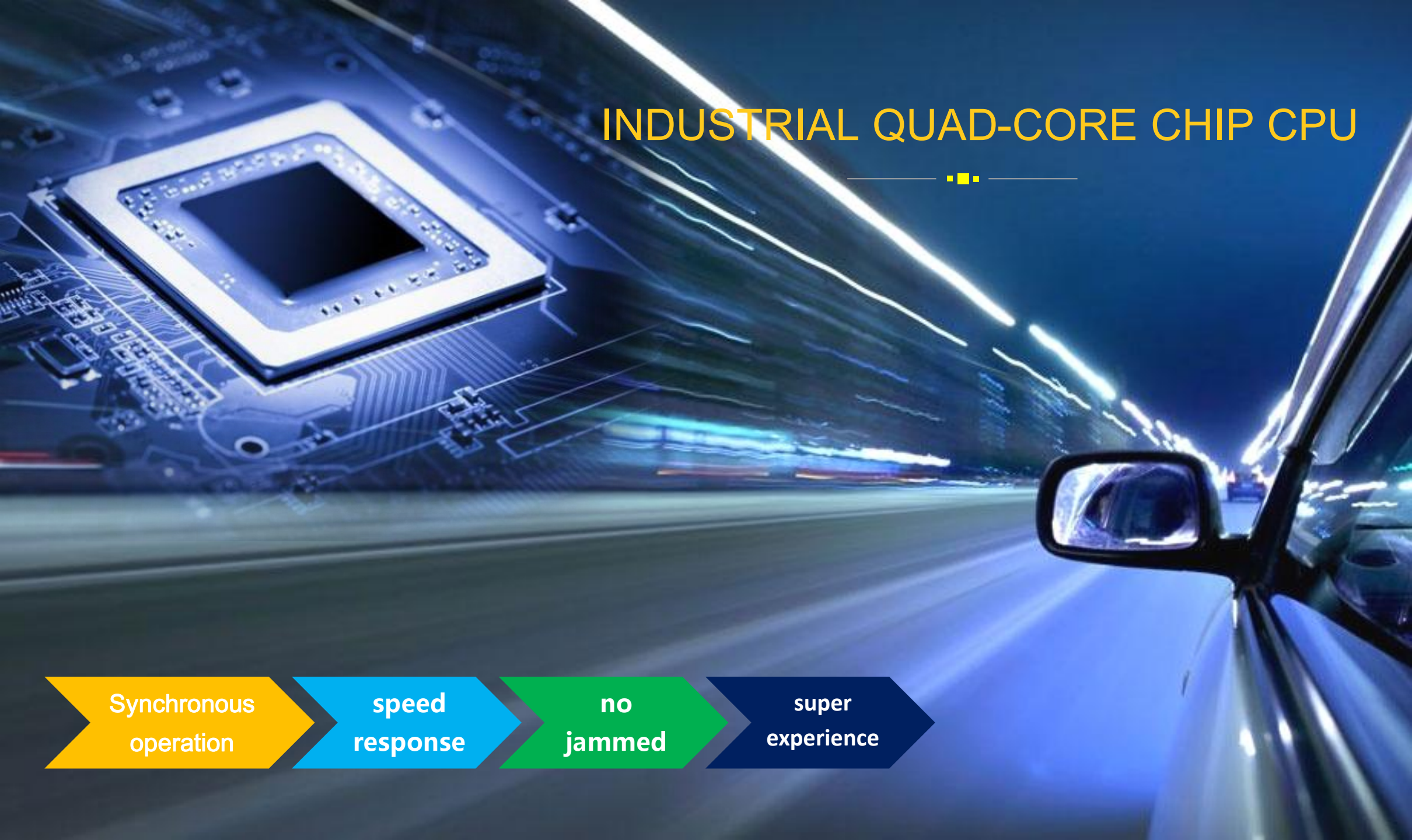


Remove the stool



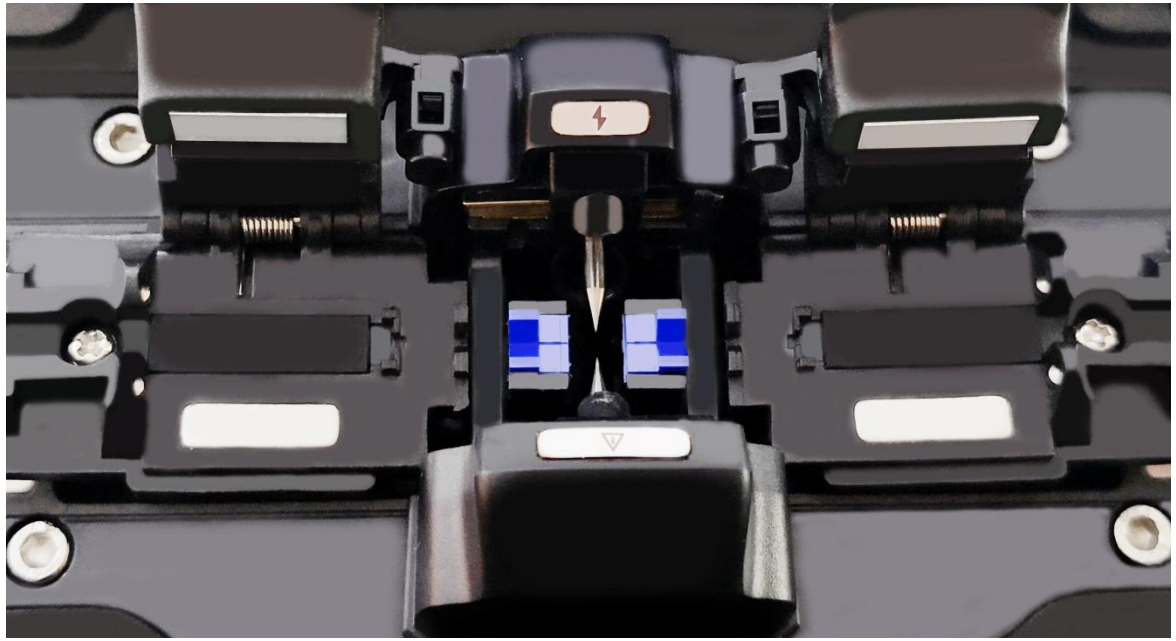
Do not need to take out the splicer machine from the toolbox while working.




INDUSTRIAL QUAD-CORE CHIP CPU
Synchronous operation
speed response
no jammed
super experience

3 IN 1 FIBER HOLDER

SM, MM, bare fiber, pigtail, rubber-insulated, multi fiber cable



THE BATTERY POPUP AUTOMATICALLY



7800 mA high-capacity lithium battery

- charging time ≤ 3.5 hours
- continuous splicing and heating about 200 times



Press to popup the battery

Show good performance in plateau, desert, and extreme cold environment







BASIC PARAMETER

Fiber alignment	Core/cladding alignment / Manual alignment	Built-in lighting	easy for night operation
Splicing time	5S	Tension Test	Standard 2N
Heating time	15S	Fiber holders	3 in 1 fiber holder, SM, MM, bare fiber, pigtail, rubber-insulated, multi fiber cable
Heating mode	Automatic heating (Preheating)	Magnification	300 for X or Y view, 150 for X or Y view
Focus mode	Six motors Auto focus	Screen	5 inch TFT color display
Applicable Fibers	SM(G.652&G.657)、MM (G.651) 、DS(G.657)、NZDS (G.655)	Splicing Mode	Normal / high precision splicing
Splice Loss	0.025dB (SM) 、0.01dB (MM) 0.04dB (DS/NZDS)	Splicing method	Fully automatic、Step by step splicing
Control technology	Real-time control and calibration of fusion ARC	Splicing record storage	Synchronize to the phone, the server to cloud storage unlimited
Return loss	Better than 60DB	Built-in battery	7800 mA high-capacity lithium battery, charging time ≤ 3.5 hours, continuous splicing and heating about 200 times
Fiber diameter	Cladding Diameter：80-150μm Coating Diameter：100-1000μm	Power supply	Input AC100-240V 50 / 60HZ, output DC13.5V / 4A, the current power mode can be identified, real-time detection of battery power
Fiber Cleave Length	Coating less than 250μm：8-16mm Coating less than 250-1000μm:16mm	Operating Conditions	Temperature -15 ~ +50 ℃, humidity: <95% RH (no condensation) Working altitude: 0 ~ 5000m. Resist max. wind speed: ≤ 15m / s
Software updates Length	Automatically update、 Update by a key	Shrinkable tube	60mm、50mm、40mm、25mm
Boot time	1 second	Product protection	Waterproof, dust proof, shock-resistant
Visual Fault Locator	Power:15mw,2hzflashing And Constantly Bright Mode	Optical Power Meter	Wavelength:850nm、1300nm、1310nm、1490nm、1550nm、1625nm Measuring Range:-70 ~ +6db Absolute Error:<0.3db(-50dbm ~ +3dbm Range)

Accessories in the tool box



Fiber Cleaver



Spare electrode



Wire stripping pliers



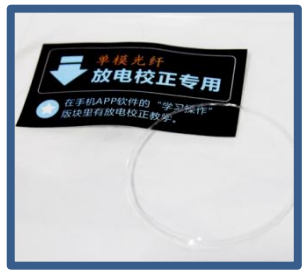
Miller stripper



Hex key



carrying case



Fiber for
ARC calibration



Strap



Power Adapter



Alcohol Bottle



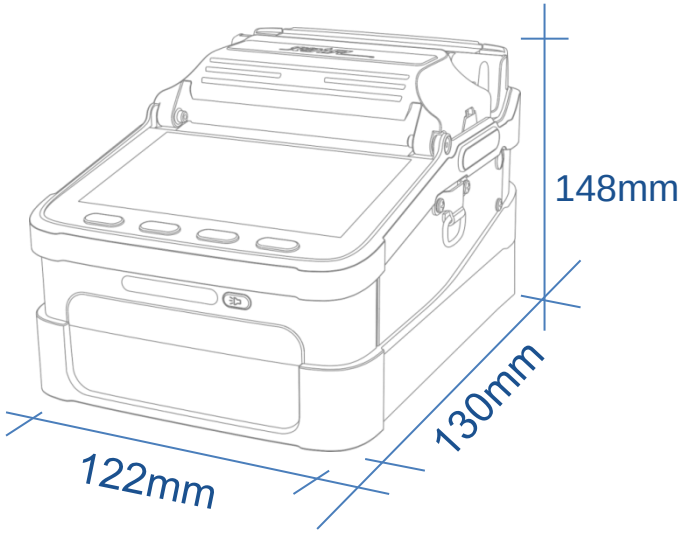
Brush

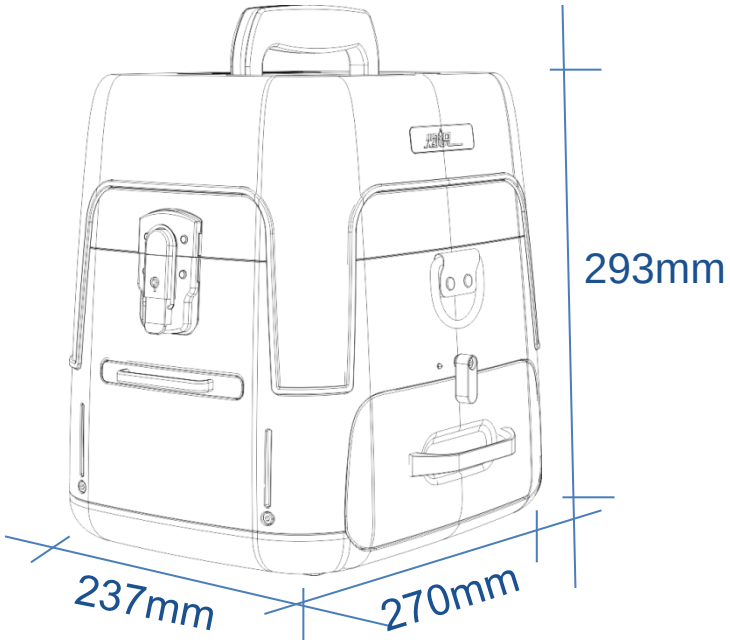


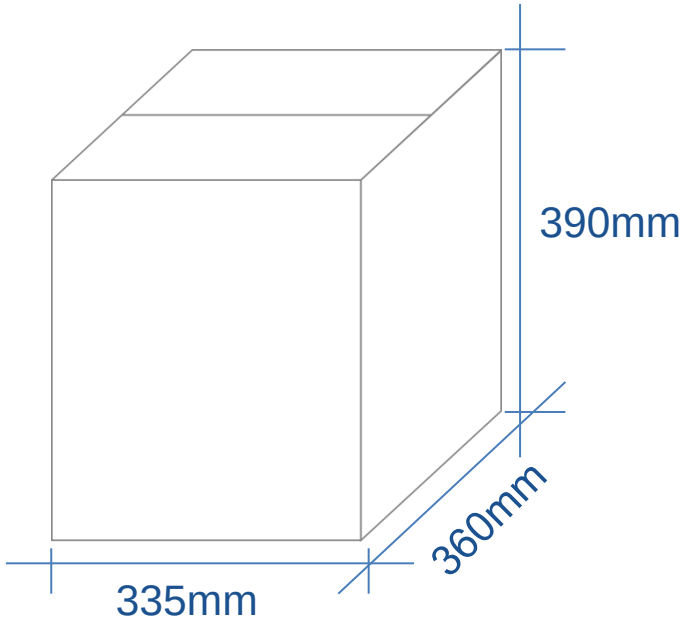
User' s manual
Quality Certificate
Warranty Card

OPTICAL FIBER FUSION SPLICER

SIZE







ABOUT US





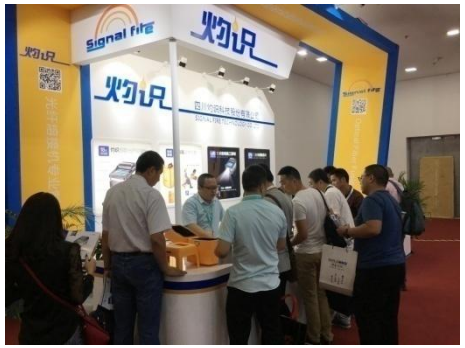
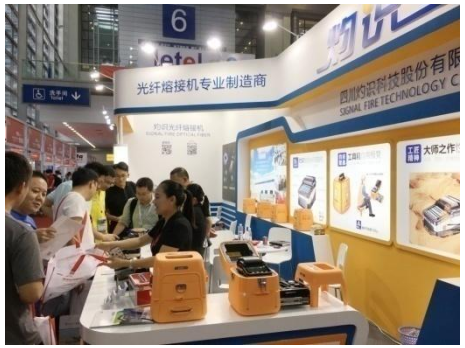


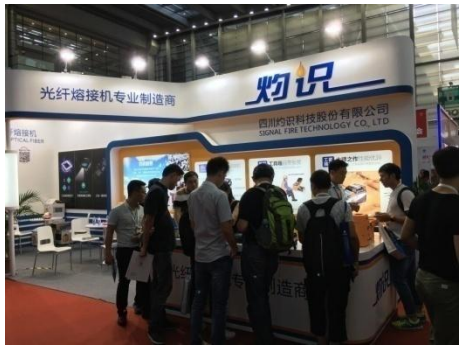
Signal Fire Technology Co.,Ltd. Is A High-Tech Enterprise Which Is Specialized In Research And Development, Production And Sales Of Communications Products. The Main Products Are Automatic Intelligent Optical Fiber Fusion Splicer, Optical Time Domain Reflectometer (OTDR), Light Power Meter, Optical Cable Construction Tools Equipment, Fiber Fusion And Taper Equipment, Optical Cable Blowing Machine Etc. Our Products Are Widely Used In China Telecom, China Mobile, China Unicom, Broadcasting, Electricity, Railways, Petrochemical, Military, Coal Industry, Research Institutions And Other Fields.

Our Company Has A Modern Production Plant And Standardized Office Buildings, With A Total Area Of Nearly 6,000 Square Meters, About 200 Employees, Including 10 Senior Engineers, 12 Master's Degree Or Above, Bachelor Degree Or Above Accounted For 45%. Our Company Owns Independent Intellectual Property Rights For Signal Fire Automatic Intelligent Optical Fiber Fusion Splicer And Its Related Products. Our Products Have Been Sold To Many Countries And Regions, Including North America, South America, Europe And Southeast Asia Etc, Our Products Have Gained Highly Praise From Customers.

EXHIBITION PHOTOS



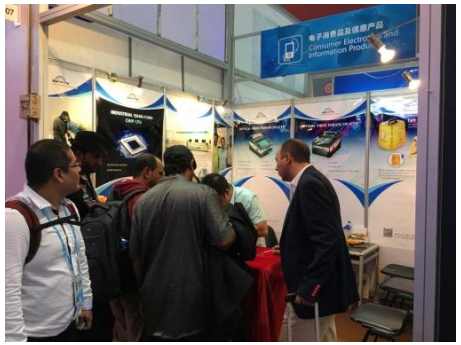




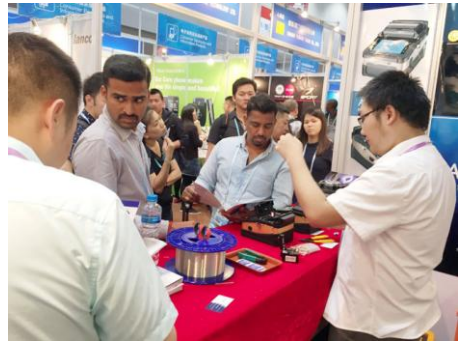





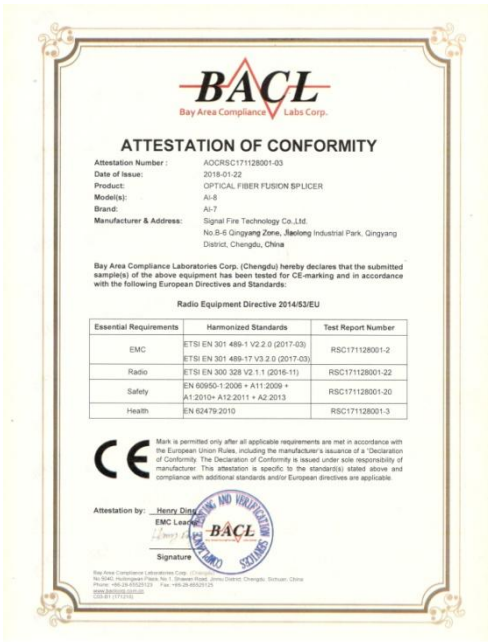
EXHIBITION PHOTOS




INTELLECTUAL PROPERTY



BACL
Bay Area Compliance Labs Corp.

ATTESTATION OF CONFORMITY

Attestation Number : AOCRSC171128001-03
Date of Issue: 2018-01-22
Product: OPTICAL FIBER FUSION SPLICER
Model(s): AI-8
Brand: AI-7
Manufacturer & Address: Signal Fire Technology Co.,Ltd. No.B-6 Qingyang Zone, Jiaolong Industrial Park, Qingyang District, Chengdu, China

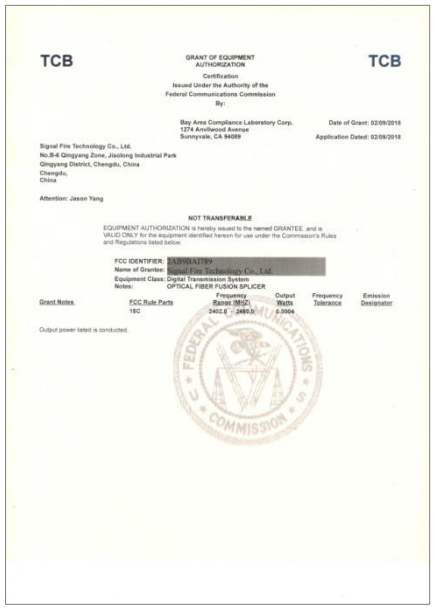
Bay Area Compliance Laboratories Corp. (Chengdu) hereby declares that the submitted sample(s) of the above equipment has been tested for CE-marking and in accordance with the following European Directives and Standards:

Radio Equipment Directive 2014/53/EU

Essential Requirements	Harmonized Standards	Test Report Number
EMC	ETSI EN 301 489-1 V2.2.0 (2017-03) ETSI EN 301 489-17 V3.2.0 (2017-03)	RSC171128001-2
Radio	ETSI EN 300 328 V2.1.1 (2016-11)	RSC171128001-22
Safety	EN 60950-1:2006 + A11:2009 + A1:2010+ A12:2011 + A2:2013	RSC171128001-20
Health	EN 62479:2010	RSC171128001-3

CE Mark is permitted only after all applicable requirements are met in accordance with the European Union Rules, including the manufacturer's issuance of a "Declaration of Conformity. The Declaration of Conformity is issued under sole responsibility of manufacturer. This attestation is specific to the standard(s) stated above and compliance with additional standards and/or European directives are applicable.

Attestation by: Henry Ding
EMC Leader
Signature



TCB GRANT OF EQUIPMENT AUTHORIZATION TCB

Certification
Issued Under the Authority of the Federal Communications Commission By:

Bay Area Compliance Laboratory Corp.
1274 Anvilwood Avenue
Sunnyvale, CA 94089

Date of Grant: 02/09/2018
Application Dated: 02/09/2018

Signal Fire Technology Co., Ltd.
No.B-6 Qingyang Zone, Jiaolong Industrial Park
Qingyang District, Chengdu, China
Chengdu,
China

Attention: Jason Yang

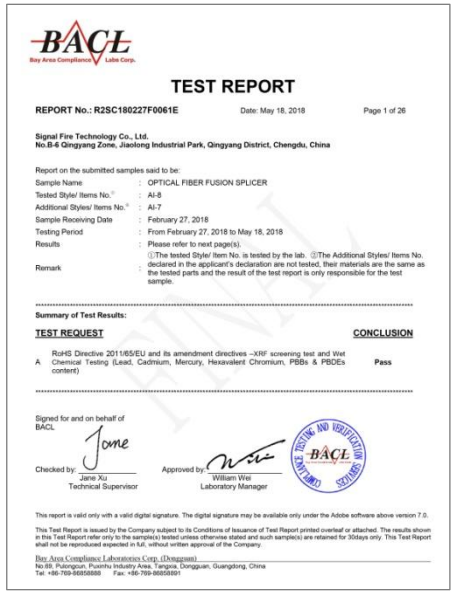
NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: 2ABWBAI7789
Name of Grantee: Signal Fire Technology Co.,Ltd.
Equipment Class: Digital Transmission System
Notes: OPTICAL FIBER FUSION SPLICER

Grant Notes	FCC Rule Parts	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission Designator
	15C	2402.0 - 2480.0	0.0004		

Output power listed is conducted.



BACL
Bay Area Compliance Labs Corp.

TEST REPORT

REPORT No.: R2SC180227F0061E Date: May 18, 2018 Page 1 of 26

Signal Fire Technology Co., Ltd.
No.B-6 Qingyang Zone, Jiaolong Industrial Park, Qingyang District, Chengdu, China

Report on the submitted samples said to be:

Sample Name	:	OPTICAL FIBER FUSION SPLICER
Tested Style/ Items No.①	:	AI-8
Additional Styles/ Items No.②	:	AI-7
Sample Receiving Date	:	February 27, 2018
Testing Period	:	From February 27, 2018 to May 18, 2018
Results	:	Please refer to next page(s).
Remark	:	①The tested Style/ Item No. is tested by the lab. ②The Additional Styles/ Items No. declared in the applicant's declaration are not tested, their materials are the same as the tested parts and the result of the test report is only responsible for the test sample.

Summary of Test Results:

TEST REQUEST		CONCLUSION
A.	RoHS Directive 2011/65/EU and its amendment directives –XRF screening test and Wet Chemical Testing (Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs & PBDEs content)	Pass

Signed for and on behalf of BACL

Checked by: Jane Xu, Technical Supervisor
Approved by: William Wei, Laboratory Manager

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.

Bay Area Compliance Laboratories Corp. (Dongguan)
No.69, Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China
Tel: +86-769-88858888 Fax: +86-769-88858891



Certificate

Certificate No.: 11417Q43162R0M

This is to certify that the Quality Management System of

SICHUAN ZHUOSHI TECHNOLOGIES CO., LTD.

Unified Social Credit Code: 91510100072411028D

Registered/Production Address:No.B-6, Qingyang Park, Jiaolong Industrial Port, Qingyang District, Chengdu City

Office Address:No.404, Floor 4, Guancheng Garden(Tianxiangge), NO.123, Xiaonan Street, Chengdu CITY, Sichuan Province

Has been audited to conform to the following Quality Management System standard

GB/T 19001-2016/ISO 9001:2015

This Quality Management System is valid for the

Development and production of optical fiber splicer

Initial issued date: Aug. 22, 2017
Date of issue: Aug. 22, 2017
Date of expiry: Aug. 21, 2020

Issued by:

Beijing East Allreach Certification Center Co., Ltd.

EACC ISO 9001 IAF CNAS

ISO 9001 ISO 9001

CE FCC ROHS IOS9001

PATENTS FOR INVENTIONS



证书号第1662044号

发明专利证书

发明名称：光纤熔接机的光纤推进控制方法及光纤熔接机

发明人：罗春晖

专利号：ZL 2013 1 0379722.8

专利申请日：2013年08月28日

专利权人：罗春晖

授权公告日：2015年05月13日

本发明经过本局依照中华人民共和国专利法进行审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

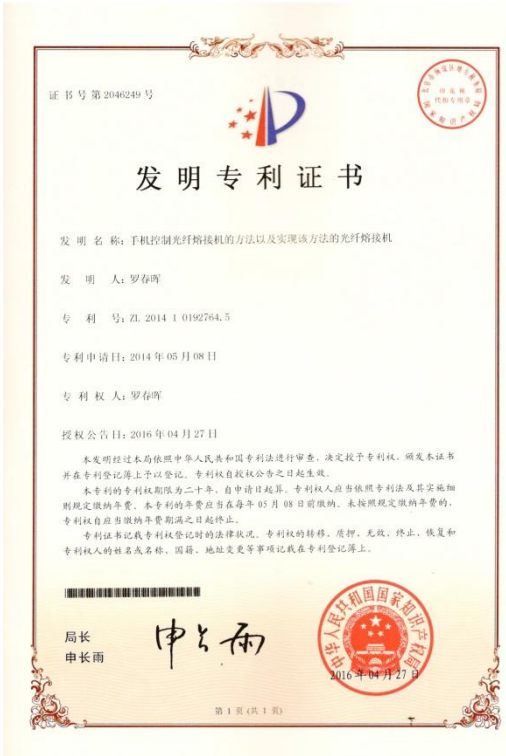
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专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长
申长雨

2015年05月13日

第1页(共1页)



证书号第2046249号

发明专利证书

发明名称：手机控制光纤熔接机的方法以及实现该方法的光纤熔接机

发明人：罗春晖

专利号：ZL 2014 1 0192764.5

专利申请日：2014年05月08日

专利权人：罗春晖

授权公告日：2016年04月27日

本发明经过本局依照中华人民共和国专利法进行审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

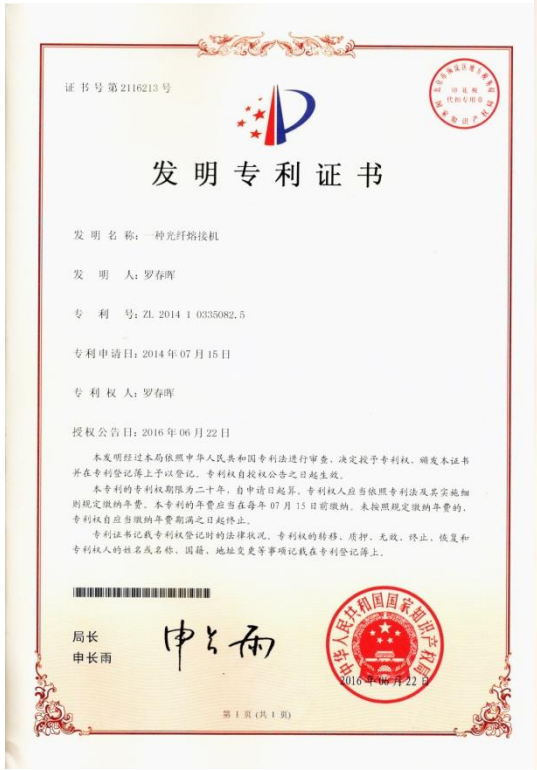
本专利的专利权期限为二十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年05月08日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长
申长雨

2016年04月27日

第1页(共1页)



证书号第2116213号

发明专利证书

发明名称：一种光纤熔接机

发明人：罗春晖

专利号：ZL 2014 1 0335082.5

专利申请日：2014年07月15日

专利权人：罗春晖

授权公告日：2016年06月22日

本发明经过本局依照中华人民共和国专利法进行审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

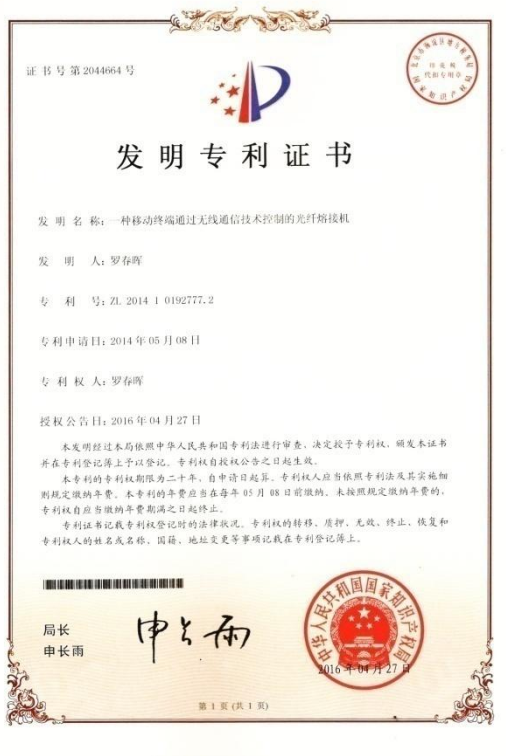
本专利的专利权期限为二十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年07月15日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

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局长
申长雨

2016年06月22日

第1页(共1页)



证书号第2044664号

发明专利证书

发明名称：一种移动终端通过无线通信技术控制的光纤熔接机

发明人：罗春晖

专利号：ZL 2014 1 0192777.2

专利申请日：2014年05月08日

专利权人：罗春晖

授权公告日：2016年04月27日

本发明经过本局依照中华人民共和国专利法进行审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

本专利的专利权期限为二十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年05月08日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

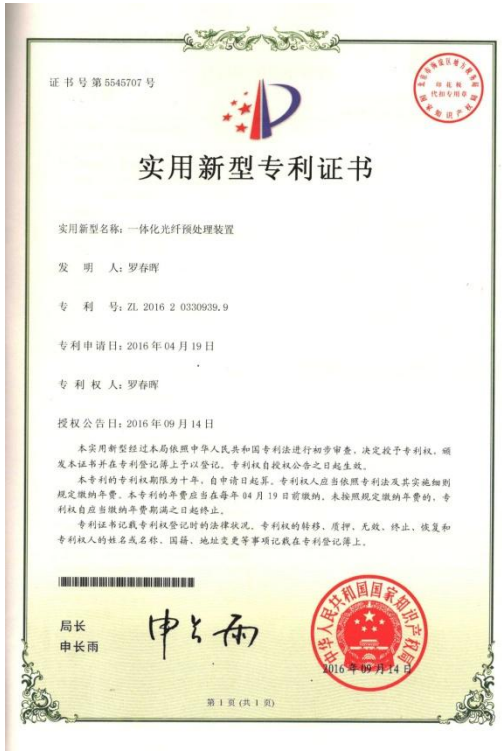
专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长
申长雨

2016年04月27日

第1页(共1页)

PATENTS OF UTILITY MODEL


证书号第5545707号

实用新型专利证书

实用新型名称：一体化光纤预处理装置

发 明 人：罗春晖

专 利 号：ZL 2016 2 0330939.9

专利申请日：2016年04月19日

专 利 权 人：罗春晖

授权公告日：2016年09月14日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

本专利的专利权期限为十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年04月19日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长 申长雨

2016年09月14日

第1页(共1页)


证书号第3147253号

实用新型专利证书

实用新型名称：一种用于光纤熔接机的电极座

发 明 人：罗春晖

专 利 号：ZL 2013 2 0219700.0

专利申请日：2013年04月26日

专 利 权 人：罗春晖

授权公告日：2013年09月04日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

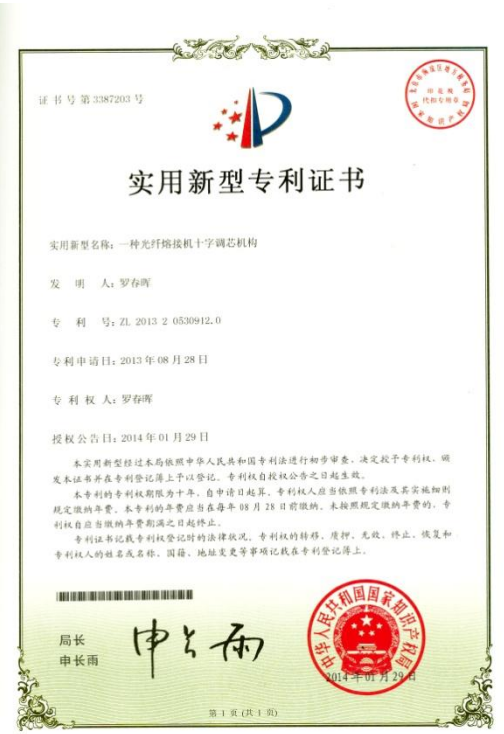
本专利的专利权期限为十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年04月26日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长 田力普

2013年09月04日

第1页(共1页)


证书号第3387203号

实用新型专利证书

实用新型名称：一种光纤熔接机十字调芯机构

发 明 人：罗春晖

专 利 号：ZL 2013 2 0530912.0

专利申请日：2013年08月28日

专 利 权 人：罗春晖

授权公告日：2014年01月29日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

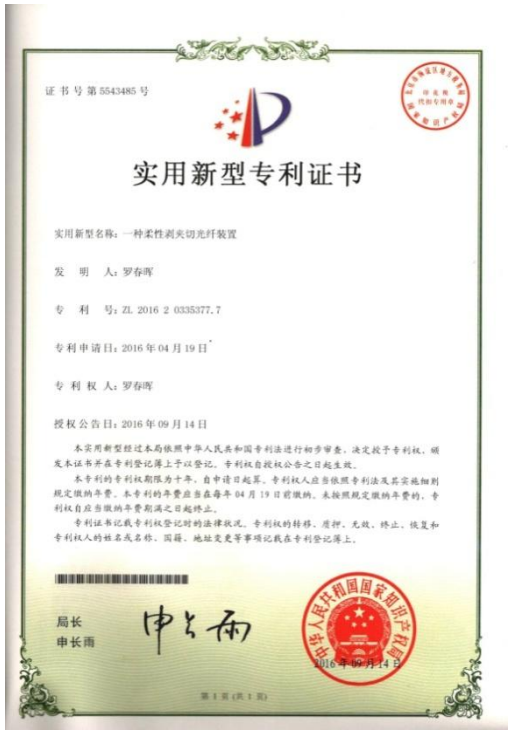
本专利的专利权期限为十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年08月28日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长 申长雨

2014年01月29日

第1页(共1页)


证书号第5543485号

实用新型专利证书

实用新型名称：一种柔性剥夹切光纤装置

发 明 人：罗春晖

专 利 号：ZL 2016 2 0335377.7

专利申请日：2016年04月19日

专 利 权 人：罗春晖

授权公告日：2016年09月14日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

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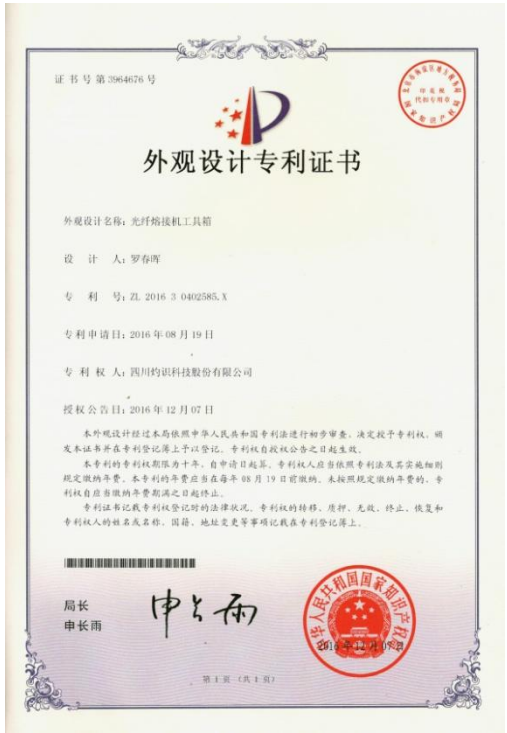
专利证书记载专利权登记时的法律状况。专利权的转移、质押、无效、终止、恢复和专利权人的姓名或名称、国籍、地址变更等事项记载在专利登记簿上。

局长 申长雨

2016年09月14日

第1页(共1页)

PATENTS OF UTILITY MODEL



证书号第3964676号

外观设计专利证书

外观设计名称：光纤熔接机工具箱

设　计　人：罗春晖

专　利　号：ZL 2016 3 0402585.X

专利申请日：2016年08月19日

专利权人：四川灼识科技股份有限公司

授权公告日：2016年12月07日

本外观设计经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

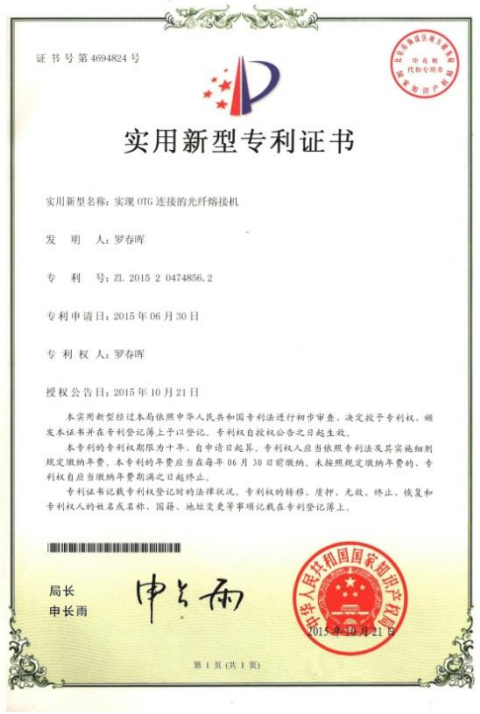
本专利的专利权期限为十年，自申请日起算。专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年08月19日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

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局长
申长雨

2016年12月07日

第1页（共1页）



证书号第4694824号

实用新型专利证书

实用新型名称：实现OTG连接的光纤熔接机

发　明　人：罗春晖

专　利　号：ZL 2015 2 0474856.2

专利申请日：2015年06月30日

专利权人：罗春晖

授权公告日：2015年10月21日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

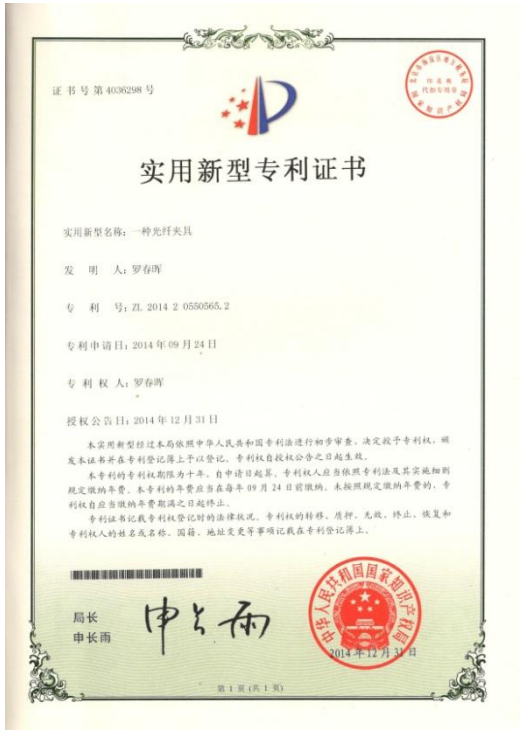
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局长
申长雨

2015年10月21日

第1页（共1页）



证书号第4036298号

实用新型专利证书

实用新型名称：一种光纤夹具

发　明　人：罗春晖

专　利　号：ZL 2014 2 0550565.2

专利申请日：2014年09月24日

专利权人：罗春晖

授权公告日：2014年12月31日

本实用新型经过本局依照中华人民共和国专利法进行初步审查，决定授予专利权，颁发本证书并在专利登记簿上予以登记。专利权自授权公告之日起生效。

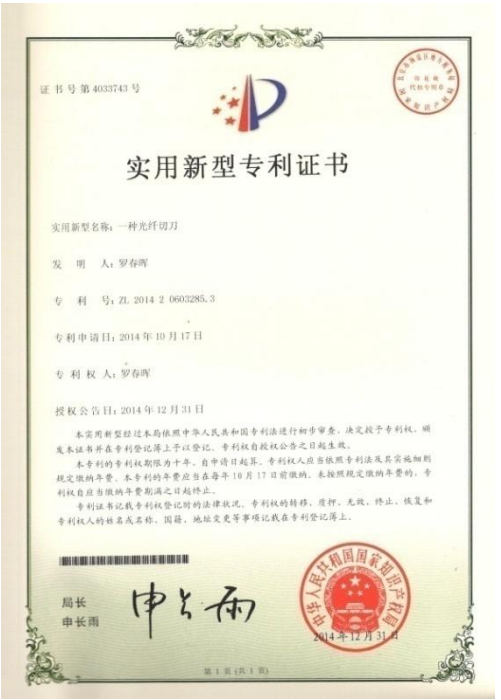
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局长
申长雨

2014年12月31日

第1页（共1页）



证书号第4033743号

实用新型专利证书

实用新型名称：一种光纤切刀

发　明　人：罗春晖

专　利　号：ZL 2014 2 0603285.3

专利申请日：2014年10月17日

专利权人：罗春晖

授权公告日：2014年12月31日

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局长
申长雨

2014年12月31日

第1页（共1页）