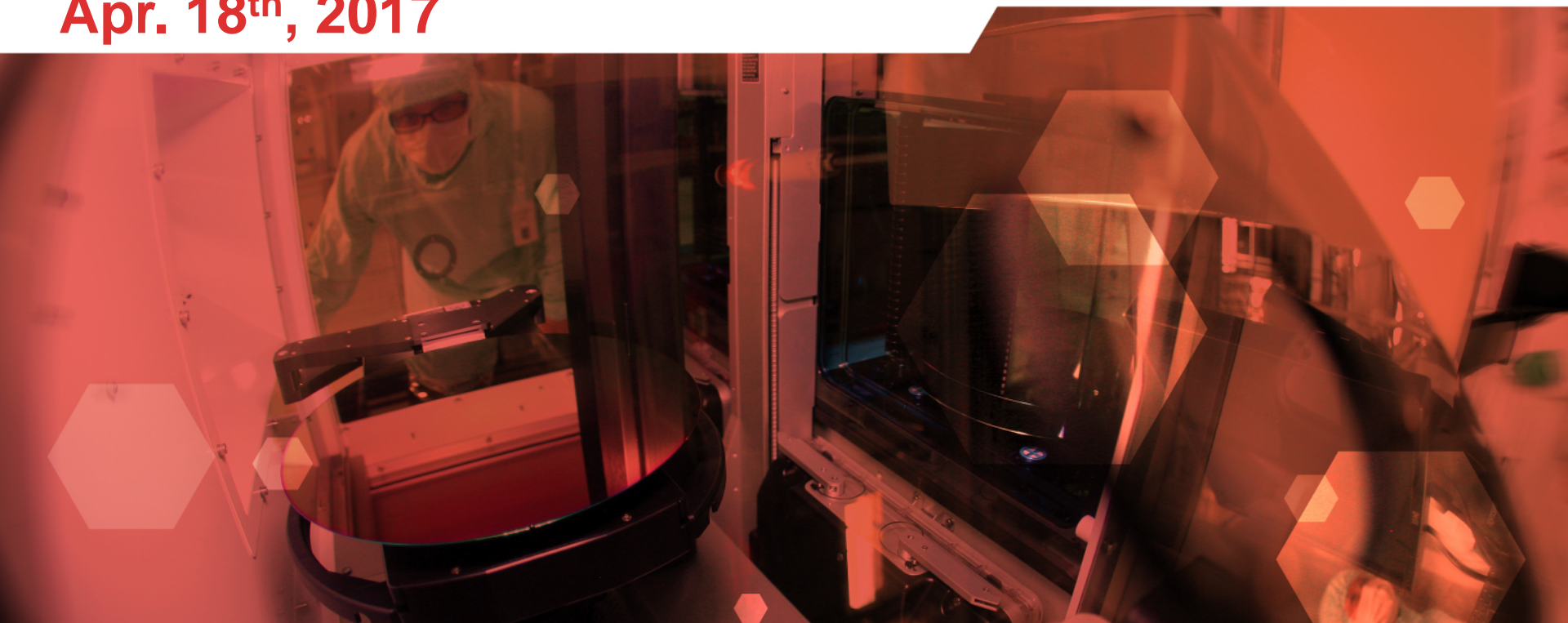


SEMI China PV Std. Technical Committee PV Module Task Force

Wei Zhou

Apr. 18th, 2017

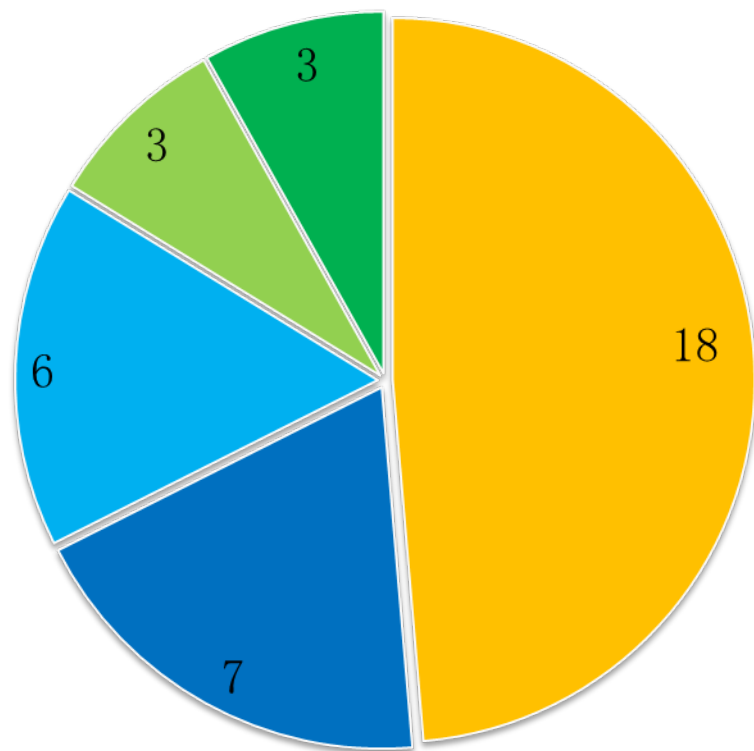


Leaders of PV Module Task Force

No.	Name	Company	Industry Chain
1	Zhou Wei	TrinaSolar (天合光能)	Cell, Module, Material, System
2	Luo Liang	Hunan Red Solar New Energy Science and Technology Co. Ltd (48所-湖南红太阳)	Cell, Module, Equipment
3	Zhu Jingbing	Sunman(上海羿仕新能源)	Cell, Module, Material
4	Zhang Zhen	Hohai University (河海大学)	Cell, Module, Material, System

Note: Industry Chain: Silicon/ Wafer/ Cell/ Module/ System/ Equipment/ Material/ Others

SEMI工作组成员单位组成图



- 组件厂商（18家，含系统厂商3家）
- 组件材料厂商（8家）
- 设备厂商（6家）
- 研究机构（3家）
- 测试认证机构（3家）

共38家单位

Members of PV Module Task Force

表1



共38家单位，68位成员/68members in 38 companies

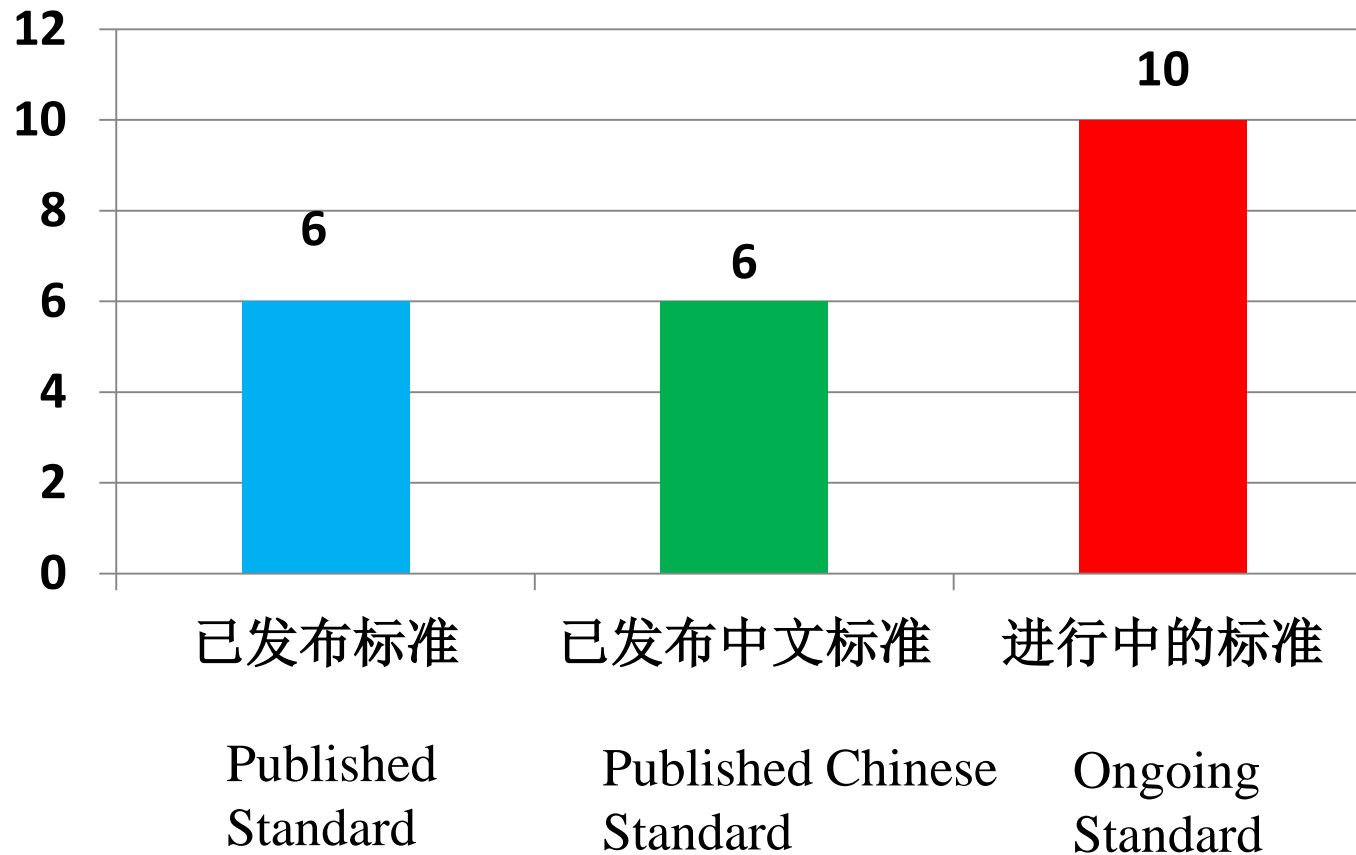
No.	Company	Name	Industry Chain	No.	Company	Name	Industry Chain
1	Trinasolar（天合光能）	Xiao Taoyun, Xu Jianmei, Yan Ping	Cell/Module/Material	11	Jinko（晶科）	Liu Zengsheng, Li Ning	Module
2	LERRI Solar（乐叶光伏）	Wang Xiaoyong, wang shihai, wang tandong	Cell/Module	12	Sunportpower（南京日托）	Lu Zhonglin, Zhu haojie	Cell/Module
3	SIBCO China（昆山希铂）	Liu Erming	Cell/Module/Equipment	13	Hx glass（鸿协）	Ge Yiyan	Material
4	Suntech（尚德）	Zhou Min	Others	14	Runma（润玛）	Ge Shiyong, He Ke	Material
5	TÜV SÜD（南德）	Wu Yaozhong	Cell/Module	15	Yingli（英利）	Yu Bo, Ni Jianxiong, Li Yingye	Module/System
6	CSI（阿特斯）	Guo Suqin, Zhao Changrui	Equipment	16	Redsolar（红太阳）	Zhang Fujia, Yang Zhiquan	Module/Equipment
7	FuJian Metrology Institue（福建计量院）	Lin Jianchun, Li Jiansheng, Zhen Xiaofeng	Cell/Module	17	Hebei University（河北大学）	Mai Yaohua, Xu Ying	Cell/Module
8	Share Power（羲和）	Deng Xia,	Module	18	CPVT（国检光伏）	Hu Dan, Qin Weiguo, Song Hao	Module
9	Darbond（德邦）	Yang Heng, Xue Xingwang, Gui Yong.	Module	19	TUV Rheinland（莱茵）	Li Ningda, Christos Monokroussos	Module
10	RuiYang		EVA	20			

Members of PV Module Task Force 表1 (续)

共38家单位， 68位成员/68 members in 38 companies

No.	Company	Name	Industry Chain	No.	Company	Name	Industry Chain
21	ATLAS MTT GmbH (亚太拉斯)	Chen Zhiwu	Cell/Module	30	GCL (协鑫)	Wu Yanrong	Cell/Module
22	LDK (赛维)	Wei Xinhai, Liu Linyan	Module	31	Lightway (光为绿色)	Li Huiling, Yang Chuanfu, Wang Zhanyou	Cell/Module
23	Talesun (中利腾晖)	Ni Zhichun, Wei Qingzhu	Cell/module/ System	32	SunChine (尚灿)	Wang Tong ,Wei Shimeng	Module/Material
24	Xinyang Normal University (信阳师范)	Liu Yanlie,Geng Xiaoju	Equipment	33	ASIC PY (沛煜光电)	Chen Chao	Test
25	Jolywood (苏州中来)	Zhao Tongrong, Xia Wenjin, Sun Yuhai	Cell/Module	34	Gsolar Power (陕西众森)	Zeng Xiangchao	EL Test &So on.
26	Lucky Film (乐凯胶片)	Li Huafeng	Material	35	Shanghai JA solar (晶澳)	Xu Desheng,Li Tao,Liu Lingling	relibility test/Module
27	Cybrid Technologies (苏州赛伍)	Dai Jianfang	Others	36	HQCL (韩华新能源)	Li Zhiwei	Cell/Module
28	DuPont (杜邦)	Hu Hongjie	Material and Test	37	BKC Materials (拜科通新材料)	Ning Haiyang	Material
29	GGSolar (正硅新能源)	He Like, Tang Baisheng	Smart module/Syst em	38	Primary technical scientist (富士胶片)	刘利明 /Toshiaki Hayashi	Others

Work Summary of PV Module Task Force



Standards had been published (6项)



NO.	Standard Number	Title	Editor	Chinese Verion
1	SEMI PV44-0513	Specification for package protect for PV module/光伏组件包装保护技术规范	Trina/ 天合	Published/ 已发布
2	SEMI PV45-0513	Vinyl Acetate (VA) content test method for Ethylene-Vinyl Acetate (EVA) applied in photovoltaic modules-TGA/光伏组件用EVA VA含量测试方法-TGA	Trina/ 天合	Published/ 已发布
3	SEMI PV47-0513	Specification for Anti-Reflective Coated Glass, Used in Crystalline Silicon Photovoltaic Modules / 晶体硅光伏组件用抗反射镀膜玻璃技术规范	Suntech/尚德	Published/ 已发布
4	SEMI PV61-0115	Specification for Framing Tape for PV Modules/光伏组件用封框胶带技术规范	Yingli/英利	Published/ 已发布
5	SEMI PV62-0215	Terminology for Back Contact PV Cell and Module / 背接触光伏电池和组件术语	Sibco / 昆山希铂 (刘尔明)	Published/ 已发布
6	SEMI PV63-0215	Specification for Ultra-thin glasses used for photovoltaic modules/光伏组件用超薄玻璃	Trina/ 天合	Published/ 已发布

Number	Title	Development
DOC 5925 Trina	Specification for Dual-glass Module with Crystalline Silicon Terrestrial Solar Cell/地面用平面双层夹胶玻璃晶体硅太阳能电池组件	According to the feedback from 2016-7 Cycle, modify DRAFT and submit to the core committee for review, enter into 2017-5 Cycle;
DOC 6070 Trina/CSI/ Fjfl	Test Method for Cell Defects in Crystalline Silicon PV Modules by Electroluminescence (EL) Imaging/光伏组件EL测试方法	Cycle/According to the feedback from 2016-7 Cycle, modify DRAFT and submit to the core committee for review, enter into 2017-5 Cycle;
DOC 5661 Yingli	Test Method for Electrical Parameters of Bifacial Solar Module/双面太阳能组件电性能参数测试方法	According to the feedback from 2017-1 Cycle, modify DRAFT and submit to the core committee for review, enter into 2017-5 Cycle;
DOC 5968 Yingli	Guide for Sample Preparation Method for Photovoltaic Backsheet Performance Tests/光伏组件用背板保持率测试指南	According to the feedback from 2017-1 Cycle, modify DRAFT and submit to the core committee for review, enter into 2017-5 Cycle;
DOC 5840 FJFL	Guide for Calibration of PV Module UV Test Chambers/光伏组件用紫外老化试验箱辐照性能测量方法	提请核心委员审核，进入A&R审核/Submit to the core committee for review, enter into A & R review
DOC 5725 Hohai	Practice for Metal Wrap Through (MWT) Back Contact PV Module Assembly/金属贯穿背接触光伏组件组装实践	Draft稿提请核心委员审核，进入2017-5 Cycle/Submit Draft to the core committee for review, enter into 2017-5 Cycle
DOC 5982 CSI	Specification for Crystalline Silicon Photovoltaic Module Dimensions/光伏晶体硅组件尺寸规范	Draft稿提请核心委员审核，进入2017-5 Cycle/Submit Draft to the core committee for review, enter into 2017-5 Cycle
DOC 6069 Trina	Specification for Structural Silicone Adhesive for the Back Rail Fixture on PV Modules/组件背面粘接背梁的硅酮结构胶	Edit of draft is ongoing / Draft稿进行中
DOC 6073 Trina	Specification for Crystalline Silicon PV Modules with Integrated Power Optimizer/具有功率优化功能晶体硅光伏组件规范	Edit of draft is ongoing / Draft稿进行中
DOC 6113 CSI	Test Method for Abrasion Resistance of the Polymer Backsheet of Crystalline Silicon Solar Modules/晶体硅太阳能电池组件用聚合物背板	Edit of draft is ongoing / Draft稿进行中

SEMI Draft Document 5925 (Trina-Zhu Qiangzhong)

Doc. Name: Specification for Dual-glass Module with Crystalline Silicon Terrestrial Solar Cell/地面用平面双层夹胶玻璃晶体硅太阳能电池组件

Content:

- The standard mainly includes the requests and corresponding testing methods of dual-glass module;/ 本标准主要包含是双玻组件的要求及对应的测试方法;
- The DRAFT has modified according to the feedback of global 2016-7 Cycle ballots, by voting from module team, now submitted to the core committee for review and enter into 2017-5 Cycle./ 根据2016年度全球第7轮投票反馈意见, 对DRAFT 进行修改, 通过组件工作组投票, 现提请核心委员审核进入2017-5 Cycle。

Documents in Work 10-2

SEMI Draft Document 6070 (Trina, CSI, FJL) (Trina-Yan Ping)

Doc. Name: Test Method for Cell Defects in Crystalline Silicon PV Modules by Electroluminescence (EL) Imaging/晶体硅光伏组件电池片缺陷电致发光测试方法

Content:

➤The standard mainly specifies the test method, image classification and test equipment of EL test for crystalline silicon PV modules./本标准主要是关于光伏组件EL测试方法、EL分类及EL 测试设备的要求。

➤The DRAFT has modified according to the feedback of global 2016-7 Cycle ballots, by voting from module team, now submitted to the core committee for review and enter into 2017-5 Cycle./根据2016年度全球第7轮投票反馈意见，对DRAFT 进行修改，通过组件工作组投票，现提请核心委员审核进入2017-5 Cycle。

Documents in Work 10-3

SEMI Draft Document 5661 (YingLi-Ni Jianxiong)

Doc. Name: Test Method for Electrical Parameters of Bifacial Solar Module/

双面太阳能组件电性能参数测试方法

Content:

- The standard mainly specifies the test method of electrical parameters for bifacial solar module./本标准主要是双面组件电性能参数的测试方法。
- The DRAFT has modified according to the feedback of global 2017-1 Cycle ballots, by voting from module team, now submitted to the core committee for review and enter into 2017-5 Cycle./根据2017年度全球第1轮投票反馈意见，对DRAFT 进行修改，通过组件工作组投票，现提请核心委员审核进入2017-5 Cycle。

Documents in Work 10-4

SEMI Draft Document 5968 (YingLi-Ni Jianxiong)

Doc. Name: Guide for Sample Preparation Method for Photovoltaic Backsheet Performance Tests/太阳能背板性能测试制样指南

Content:

- The standard mainly standardizes sample preparation method of photovoltaic backsheet performance tests; / 本标准主要包含是光伏组件用背板性能测试样品的准备;
- The DRAFT has modified according to the feedback of global 2017-1 Cycle ballots, by voting from module team, now submitted to the core committee for review and enter into 2017-5 Cycle./ 根据2017年度全球第1轮投票反馈意见, 对DRAFT 进行修改, 通过组件工作组投票, 现提请核心委员审核进入2017-5 Cycle。

SEMI Draft Document 5840 (FJJL-Li Jiansheng)

Doc. Name: Guide for Calibration of PV Module UV Test Chambers/光伏组件用紫外老化箱校准方法指南

Content:

- The standard mainly includes test method of PV Module UV test chambers; / 本标准主要包含光伏组件用紫外老化试验箱辐照性能的测量方法;
- Passed the 2017-1 Cycle global ballots, submit to the core committee for review and enter into next stage of A & R./通过2017年度第1轮投票，提请核心委员审核，进入下一阶段**A&R**审核。

SEMI Draft Document 5725 (Hohai University-Zhang Zhen)

Doc. Name: Practice for Metal Wrap Through (MWT) Back Contact PV Module Assembly/金属贯穿背接触光伏组件组装实践

Content:

- The standard mainly specifies the technical requirements and corresponding test method of metal wrap through (MWT) PV module./本标准主要是关于MWT 组件生产实践技术要求 and 对应的试验方法。
- The edit of DRAFT has been finished. Now it is submitted to the core committee for audit, and then it will be voted in cycle 5-2017 global ballots./现已完成DRAFT，提请核心委员审核，进入2017年度第5轮全球投票。

SEMI Draft Document 5982 (CSI-Xu Tao)

Doc. Name: Specification for Crystalline Silicon Photovoltaic Module Dimensions /
光伏晶体硅组件尺寸规范

Content:

- The standard mainly specifies the dimensions and installation hole position of crystalline silicon PV module./本标准主要是关于组件外形尺寸和安装孔位置的规范。
- The edit of DRAFT has been finished. Now it is submitted to the core committee for audit, and then it will be voted in cycle 5-2017 global ballots./现已完成DRAFT，提请核心委员审核，进入2017年度第5轮全球投票。

SEMI Draft Document 6069 (Trina)

Doc. Name: Specification for Structural Silicone Adhesive for the Back Rail Fixture on PV Modules/组件背面粘接背梁的硅酮结构胶

Content:

- The standard mainly specifies the technical requirements and test method of structural silicone adhesive for the back rail fixture on dual-glass modules./本标准主要是关于双玻组件背梁用结构胶的技术要求和试验方法。
- The edit of draft is ongoing, and it will be submitted to the core committee for audit in China Autumn Standards Meeting 2017./草案稿在进行中，计划2017年度秋季会议提请核心委员审核。

SEMI Draft Document 6073 (Trina)

Doc. Name: Specification for Crystalline Silicon PV Modules with Integrated Power Optimizer/具有功率优化功能晶体硅光伏组件规范

Content:

- The standard specifies the technical requirements and corresponding test method of crystalline silicon PV modules with integrated power optimizer./本标准主要是关于具有功率优化功能的晶体硅光伏组件技术要求和对应的试验方法。
- The edit of draft is ongoing, and it will be submitted to the core committee for audit in China Autumn Standards Meeting 2017./草案稿在进行中，计划2017年度秋季会议提请核心委员审核。

Documents in Work 10-10

SEMI Draft Document 6113 (CSI)

Doc. Name: Test Method for Abrasion Resistance of the Polymer Backsheet of Crystalline Silicon Solar Modules/ 晶体硅太阳能电池组件用聚合物背板耐磨性能测试方法

Content:

- This standard is mainly for the testing methods for abrasion resistance of polymer-backsheet which used on crystalline silicon module./本标准主要是关于晶硅组件用聚合物背板耐磨性的测试方法。
- The edit of draft is ongoing, and it will be submitted to the core committee for audit in China Autumn Standards Meeting 2017./草案稿在进行中，计划2017年度秋季会议提请核心委员审核。

- **DOC.5725: Practice for Metal Wrap Through (MWT) Back Contact PV Module Assembly/ 金属贯穿背接触光伏组件组装实践**
- The SEMI new Snarf (DOC 5725) submitted by Kunshan Sibco was formally established in June 2014. Due to the busy business, Kunshan Sibco doesn't have time to carry out the subsequent standard drafting, etc, after consultation, Hohai University Dr. Zhang Zhen will lead to complete the subsequent work of the DOC 5725 standard project./由昆山希铂提出的 SEMI 新提案于**2014年6月**正式立项，文档号**DOC 5725**；由于业务繁忙，昆山希铂暂无时间开展后续的标准起草等工作，经过协商，现**DOC 5725标准项目**变更为由河海大学张臻博士牵头完成后续的标准制定等工作。
- **According to the rules of SEMI standards, all standard formulation process of DOC 5725 must be completed in June 2017; now this standard apply for extension of one year, extended to June 2018, submitted to the core committee for approval, thank you!/
按照SEMI 标准制定规则，DOC5725 将于2017年6月必须完成标准的全部制定流程；现该标准申请延期1年，延期至2018年6月，请核心委员批准，谢谢！**

THANK YOU