



Japan PV and PV Materials Committee Meeting Summary and Minutes

SEMI Japan Standards Spring Meetings 2013 April 12, 2013, 13:30 – 15:00 Conference Room1 JPR Bldg. SEMI Japan Office, Tokyo, Japan

Next Committee Meeting

Next Japan PV and PV Materials Committee Meeting July 23, 2013, 13:00 – 15:00 Conference Room1 JPR Bldg. SEMI Japan office, Tokyo, Japan

Committee Announcements (optional)

None

Table 1 Meeting Attendees

PV Committee Co-Chairs: Masaaki Yamamichi (AIST), Hiromu Takatsuka (Mitsubishi Heavy Industries), Kazuhiko Kashima (GlobalWafers Japan), Terry Asakawa (Tokyo Electron)

PV Materials Committee Co-Chairs: Takashi Ishihara (Mitsubishi Electric), Kazuhiko Kashima (GlobalWafers Japan

SEMI Staff: Hirofumi Kanno

Company	Last	First	Company	Last	First
AIST	Yamamichi	Masaaki	Mitsubishi Electric	Ishihara	Takashi
AIST	Fukuda	Tetsuo	GlobalWafers Japan	Kashima	Kazuhiko
Dainippon Screen Mfg	Cho	Ryuji	SCAS	Watanabe	Satoru
Nisshinbo Mechatronics	Ishikawa	Makoto			

Table 2 Leadership Changes

None

Table 3 Ballot Results (or move to Section 4, Ballot Review)

None

Table 4 Authorized Ballots (or move to Section 7, New Business)

None

Table 5 Authorized Activities (or move to Section 7, New Business)

None

Table 6 New Action Items (or move to Section 8, Action Item Review)

None

Table 7 Previous Meeting Actions Items (or move to Section 8, Action item Review)

None





1 Welcome, Reminders, and Introductions

Masaaki Yamamichi called the meeting to order at 13:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01, 2_Required Elements Reg_20100302_E+J

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion:	Approve the minutes of the previous meeting		
By / 2 nd :	Takashi Ishihara (Mitsubishi Electric) / Tetsuo Fukuda (AIST)		
Discussion:	None		
Vote:	6:0		
Attachment:	02, PV_PVM Meeting Minutes12052012_r1		

3 Liaison Reports

3.1 Europe PV Materials Committee

Hirofumi Kanno (SEMI) reported for the Europe PV Materials Committee. Of note:

- Committee Leadership
 - ► Hubert Aulich PV Crystalox Solar
 - Peter Wagner
- Committee Organization
- Committee Meeting Information
- New SNARF Approval
 - SNARF for a Line Item Revision to PV42, Test Method for In-Line Measurement of Waviness on PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments
- Ballot Result Summary
 - Doc 5434, New Standard: Test Method for In-Line Measurement of Lateral Dimensional Characteristics of Square and Pseudo-Square PV Silicon Wafers - PASSED
 - Doc 5531, Revision to PV40, Test Method for In-Line Measurement of Saw Marks on PV Silicon Wafers by a Light Sectioning Technique Using Multiple Line Segments - PASSED
 - Doc 5502, Revision to PV39, Test Method for In-Line Measurement of Cracks in PV Silicon Wafers by Dark Field Infrared Imaging - PASSED
 - > Doc 5530, New Standard: Specification for Orientation Fiducial Marks for PV Silicon Wafers PASSED
- TFs Reports

Attachment: 03, EU PV Materials Liaison Report 20130315

3.2 North America PV Materials Committee

Hirofumi Kanno (SEMI) reported for the North America PV Materials Committee. Of note:

• Committee Leadership





- Lori Nye (Brewer Science)
- ➢ John Valley (MEMC)
- Committee Organization
- Committee Meeting Information
- New SNARF Approval
 - Auxiliary document to include interlaboratory study for PVxx- Test Method for the Measurement of Elemental Impurity Concentrations in Silicon Feedstock for Silicon Solar Cells By Bulk Digestion, Inductively Coupled-Plasma Mass Spectrometry
- Ballot Result Summary
 - Document 4675C, New Standard: Test Method for the Measurement of Elemental Impurity Concentrations in Silicon Feedstock for Silicon Solar Cells By Bulk Digestion, Inductively Coupled-Plasma Mass Spectrometry - PASSED, pending ISC A&R Review
 - Document 5439, Line Item Revision to SEMI PV13-1111, Test Method for Contactless Excess-Charge-Carrier Recombination Lifetime Measurement in Silicon Wafers, Ingots, and Bricks Using an Eddy-Current Sensor - PASSED, pending ISC A&R Review
- TFs Reports

Attachment: 04, NA Liaison Report PV Materials 20130408

3.3 Taiwan PV Committee

Hirofumi Kanno (SEMI) reported for the Taiwan <Committee Name> Committee. Of note:

- Committee Leadership
 - ➢ B.N. Chuang (CMS-ITRI)
 - ➢ J.S.Chen (TeraSolar)
 - Ray Sung(UL Taiwan)
- Committee Organization
- Committee Meeting Information
- TFs Reports

Attachment: 05, Taiwan PV_Liaison_20121221(2)

3.4 China PV Committee

Hirofumi Kanno (SEMI) reported for the China PV Committee. Of note:

- Committee Leadership
 - Guangchun Zhang (Canadiansolar)
 - > Jun Liu (China Electronics Standardization Institute)
- Committee Organization
- Committee Meeting Information
- New SNARF Approval





- Doc.5564, New Standard: Test Method for the Measurement of Chlorine in Silicon by Ion Chromatography (PV Silicon Raw Materials Task Force)
- Doc.5563, New Standard: Specification for Framing Tape for PV Modules (Crystalline Silicon PV Module TF)
- Ballot Result Summary
 - Doc. 5384, New Standard: Specification for Package protection technology for PV Modules PASSED with editorial changes
 - Doc. 5385, New Standard: Test Method for the content of Vinyl Acetate (VA) in Ethylene-Vinyl Acetate (EVA) applied in PV modules—Thermal Gravimetric Analysis (TGA) – PASSED with editorial changes
 - Doc. 5475, New Standard: Specification for Anti-reflective-coated Glass, Used In Crystalline Silicon Photovoltaic Modules - PASSED with editorial changes
 - Doc. 5428, New Standard: Specification for Impurities in Polyethylene Packaging Materials for Polysilicon Feedstock - FAILED
 - Doc. 5382, New Standard: Specification for Quasi-monocrystalline Silicon Wafers used in Photovoltaic Solar Cells - FAIED

• TFs Reports

Attachment: 06, China Photovoltaic Committee Liaison Report20130329

3.5 SEMI Staff Report

Hirofumi Kanno (SEMI) gave the SEMI Staff Report. Of note:

- Global SEMI Events
- Standards Meetings during SEMICON West
- Ballot Critical Dates
- Publication Update
- ISC A&R SC Summary February 2013
- Recent Regulations & Procedure Guide Revisions

Attachment: 07, SEMI Staff Report 2013 April R1.0





4 Subcommittee & Task Force Reports

4.1 Japan PV Materials Task Force

Tetsuo Fukuda (AIST) reported no update for the Japan PV Materials Task Force.

5 Old Business

None

6 New Business

6.1 Discussion for having Ballot Review meeting regularly

The attendees are considering having Ballot Review meeting regularly. This issue is going to be discussed by the next committee meeting as well.

7 Action Item Review

7.1 Open Action Items

None

7.2 New Action Items

None

8 Next Meeting and Adjournment

The next meeting of the Japan PV Committee and Japan PV Materials Committee Joint meeting was scheduled for July 23, 2013 at 13:00-15:00 in SEMI Japan office, Tokyo, Japan.





Respectfully submitted by: Hirofumi Kanno Manager SEMI Japan Phone: +81.3222.5862 Email: hkanno@semi.org

Minutes approved by:

<name> (<company>), Co-chair</company></name>	<date approved=""></date>	
<name> (<company>), Co-chair</company></name>	<date approved=""></date>	

Table 8 Index of Available Attachments #1

#	Title	#	Title
01	2_Required Elements Reg_20100302_E+J	07	SEMI Staff Report 2013 April R1.0
02	PV_PVM Meeting Minutes12052012_r1		
03	EU PV Materials Liaison Report 20130315		
04	04_NA Liaison Report PV Materials 20130408		
05	05 Taiwan PV_Liaison_20121221(2)		
06	China Photovoltaic Committee Liaison Report20130329		

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.