

Europe PV Materials Committee Meeting Summary and Minutes

Intersolar Europe
20 June, 2013, 1pm – 4.30pm (CET)
ICM, Munich, Germany

Next Committee Meeting

7 October 2013, 3 to 4.30pm CET
SEMICON Europa, Dresden, Germany

Table 1 Meeting Attendees

Co-Chairs: Peter Wagner (self), Hubert Aulich (self)

SEMI Staff: Yann Guillou (Europe)

| <i>Company</i> | <i>Last</i> | <i>First</i> | <i>Company</i> | <i>Last</i> | <i>First</i> |
|------------------|-------------|--------------|----------------|-------------|--------------|
| Self | Wagner | Peter | | | |
| CoLa | Fabry | Laszlo | | | |
| Self | Aulich | Hubert | | | |
| Hennecke Systems | Dorow | Andre | | | |

Table 2 Ballot Results

None

Table 3 Authorized Ballots (or move to Section New Business)

| # | When | SC/TF/WG | Details |
|------|--------------|-------------------|---|
| 5565 | Cycle 5 | Silicon Materials | 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 |
| 5433 | Cycle 5 | Silicon Materials | New Standard, Test Method for In-line Characterization of PV Silicon Wafers regarding Grain Size |
| 5432 | Cycle 5 or 6 | Silicon Materials | New Standard, Test Method for In-line Characterization of PV Silicon Wafers by Using Photoluminescence |

Table 4 New Action Items (or move to Section Action Item Review)

| Item # | Assigned to | Details |
|---------|--------------|--|
| 2006-01 | Yann Guillou | Correct minutes of meeting in Dresden |
| 2006-02 | Peter Wagner | Send the Critical Materials questionnaire summary slides to SEMI Staff |
| 2006-03 | Yann Guillou | Ask SEMI Standard regional staff to present the questionnaire summary in their upcoming meeting and re-open the online questionnaire to increase relevance of answers. |
| 2006-03 | Yann Guillou | Ask Stephan Raithel to set up a conf call with EPIA. Hubert Aulich to be invited |

Table 5 Previous Meeting Actions Items (or move to Section 8, Action item Review)

| Item # | Assigned to | Details |
|---------|--------------|---|
| 1303-01 | Yann Guillou | Correct minutes of meeting in Dresden - CLOSED |
| 1303-02 | Peter Wagner | Prepare a short report of the results of the questionnaire - CLOSED |

| | | |
|---------|-----------------------------|---|
| 1303-03 | James Amano | Share results of questionnaire with all regions, including China - PENDING |
| 1303-04 | Peter Wagner & Huber Aulich | Check if a 2 hour workshop or technical presentations on advanced characterization technics would make sense during Intersolar Europa 2013 - CLOSED |
| 1303-05 | Yann Guillou | Contact EPIA to see if SEMI and EPIA could collaborate on standard activity - PENDING |

1 Welcome, Reminders, and Introductions

Peter Wagner and Hubert Aulich called the meeting to order at 1.10pm. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion: Approve the minutes as shown

By / 2nd: Peter Wagner / Hubert Aulich

Discussion: No

Vote: 5/0 - PASSED

3 Liaison Reports

3.1 *Japan PV/PV Materials Committee*

Yann Guillou reported for the Japan PV/PV Materials Committee.

Attachment: 1,

3.2 *China PV Committee*

Yann Guillou reported for the China PV Committee.

Attachment: 3,

3.3 *NA PV Committee*

Yann Guillou reported for the NA PV Committee.

Attachment: 4,

3.4 *SEMI Staff Report*

Yann Guillou gave the SEMI Staff Report.

Attachment: 5,

4 Subcommittee & Task Force Reports

4.1 Silicon Materials TF

Peter Wagner reported for the Silicon Materials Task Force.

He presented 3 documents that were proposed for submission to next ballot cycle. He presented the analysis on the Reference Materials (RM) questionnaire.

4.2 Ribbon TF

Ribbon TF leaders were not attending the PV Materials TC meeting. Ribbon TF did not meet recently. TF leaders were approached by TC co-chairs and they confirmed they do not plan to start any new activity in upcoming months. Action was taken to decide of the future of the Ribbon TF as the next PV Materials TC meeting in SEMICON Europa..

5 Authorized Ballot

5.1 SNARF

Peter Wagner proposed a 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.

- Line item: Exchange yl,n(x) by yu,n(x) and vice versa in §§ 14.3.5.3 and 14.3.5.4 and include D in report section of PV42

Motion: To approve SNARF

By / 2nd: Peter Wagner / Hubert Aulich

Discussion: None

Vote: 5/0 - Passed

Attachment: 10, SNARF Rev PV42 v1.0

6 Action Item Review

6.1 Open Action Items

Yann Guillou (SEMI) reviewed the open action items. All of them are closed.

- 1009-01: Clarify #5382 and PV22. Shall 5382 be included in PV22?
 - The authors have been informed but have a different opinion than EU TC.
- 1009-02: Inform China about IEC 61646 that may have a very similar scope than #5478
 - Authors have been informed
- 1009-03: Check sponsor of SNARF #5429
 - It is 48th Research Institute of China Electronics Technology Group Corporation, the contact is Liangyu Liu, liuly@cs48.com
- 1009-04: Check status of #4833
 - #4833 reference is not correct.
- 1009-05: Send a mail to Jason Lin to inform Taiwan committee there is an on-going activity on Wafer Measurement Methods
 - Done by Peter Wagner

These action items can be found in the Open Action Items table at the beginning of these minutes.

6.2 New Action Items

Yann (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

7 Next Meeting and Adjournment

The next meeting of the EU PV Materials committee is scheduled for October 7th, 2013 at SEMICON Europa in Dresden. Co-chairs adjourned the meeting at 4.30pm.

Respectfully submitted by:

Yann Guillou

Business Development and EU Standard Manager

SEMI Europe

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Email: yguillou@semi.org

Minutes approved by:

| | |
|--|------------|
| Peter Wagner (self), Co-chair | 9/09/2013 |
| Hubert Aulich (PV Cristalox), Co-chair | 12/09/2013 |

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#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 Yann Guillou at the contact information above.