Japan TC Chapter of Liquid Chemicals Global Technical Committee
Meeting Summary and Minutes

Japan Standards Summer 2014 Meetings
Monday, June 30, 2014, 15:00 – 17:00
SEMI Japan office, Tokyo, Japan

Next Committee Meeting
Wednesday, December 3, 2014, 15:00 – 17:00 [JST]
SEMICON Japan 2014, Tokyo, Japan

Committee Announcements (optional)
None

Table 1 Meeting Attendees
Co-Chairs: Hiroshi Tomita (Toshiba), Hiroyuki Araki (Dainippon Screen Manufacturing)
SEMI Staff: Chie Yanagisawa (SEMI Japan)
Attendee: 10 + SEMI: 1

<table>
<thead>
<tr>
<th>Company</th>
<th>Last</th>
<th>First</th>
<th>Company</th>
<th>Last</th>
<th>First</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIST</td>
<td>Kato</td>
<td>Haruhisa</td>
<td>Organo</td>
<td>Sugawara</td>
<td>Hiroshi</td>
</tr>
<tr>
<td>Dainippon Screen Manufacturing</td>
<td>Araki</td>
<td>Hiroyuki</td>
<td>Rion</td>
<td>Kondo</td>
<td>Kaoru</td>
</tr>
<tr>
<td>Kurita Water Industries</td>
<td>Yokoi</td>
<td>Ikunori</td>
<td>Swagelok</td>
<td>Ishida</td>
<td>Noritsugu</td>
</tr>
<tr>
<td>Nihon Entegris</td>
<td>Nagafuchi</td>
<td>Takuya</td>
<td>Toshiba</td>
<td>Tomita</td>
<td>Hiroshi</td>
</tr>
<tr>
<td>Nihon Gore</td>
<td>Yamakawa</td>
<td>Keiichi</td>
<td>SEMI Japan</td>
<td>Yanagisawa</td>
<td>Chie</td>
</tr>
<tr>
<td>Nihon Pall</td>
<td>Tadokoro</td>
<td>Masahiro</td>
<td>SEMI Japan</td>
<td>Yanagisawa</td>
<td>Chie</td>
</tr>
</tbody>
</table>

*Alphabetical order by company name

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)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
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<tbody>
<tr>
<td>20140630-1</td>
<td>SEMI Staff</td>
<td>To request the LOA for Doc. 5421A to the patent holder</td>
</tr>
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</table>

Table 7 Previous Meeting Actions Items (or move to Section 8, Action item Review)
None
1 Welcome, Reminders, and Introductions

Hiroshi Tomita (Toshiba), the co-chair, called the meeting to order at 15:00. 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: To approve the minutes of the previous meeting held on April 11, 2014 with correcting for the ballot number to 5421A at “6 Ballot Review”

By / 2nd: Takuya Nagafuchi (NihonEntegris) / Hiroyuki Araki (Dainippon Screen Mfg.)

Discussion: None

Note: 9 in favor and 0 opposed. Motion passed.

3 Liaison Reports

3.1 Europe Gases and Liquid Chemicals TC Chapter

Chie Yanagisawa (SEMI Japan) reported as attached.

Attachment: 01, EU-G&L_Liaison Report March 24, 2014

3.2 North America Liquid Chemicals TC Chapter

There was no update.

3.3 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report. Of note:

- Global SEMI Events
- Global Standards Meetings Schedule
- Ballot Critical Dates
- Publication Update
- Changes of SEMI Japan President
- Contact Information

Attachment: 02, SEMI Staff Report 2014 June_R0.3
4 Ballot Review

4.1 5421A: New Standard: Test Method for Particle Removal Performance of Liquid Filter Rated below 30 nm with ICP-MS

Document 5421A was adjudicated and passed at the Japan Liquid Chemicals TC Chapter meeting held on April 11, 2014 as the Procedural Review Voting Sheet file “5421A”. However, before the A&R procedure, the TC Chapter found that the published patent application might be possible material to Document 5421A. The Japan Liquid Chemicals TC Chapter examined the potentially material the published patent application 2013-31835 to determine whether its use is justified on technical grounds with referring the recommendation on the assessment by the Liquid Filter Task Force.

Motion: To assess the published patent application 2013-31835 are material to Document 5421A and its use is justified on technical grounds.

By / 2nd: Takuya Nagafuchi (Nihon Entegris) / Noritsugu Ishida (Swagelok)

Discussion: None

Vote: 6 in favor and 1 opposed. Motion passed.

The Japan Liquid Chemicals TC Chapter directed SEMI Japan staff, Chie Yanagisawa, to ask the published patent application 2013-31835 holder for the LOA.

Action Item #1: SEMI Staff to request the LOA for Doc. 5421A to the patent holder, Organo.

Then, the Japan Chapter of Liquid Chemicals TC adjudicated only the part of [VIII. Intellectual Property Check] for Document #5421A as follows.

**X** The meeting chair asked those present in person or by electronic link, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline.

| Potentially material patented technology or copyrighted items are known | GO TO SECTION IX |
| Potentially material patented technology or copyrighted items are known but a Letter of Assurance (LOA) or copyright release for such material has been obtained or presented to the committee. | GO TO SECTION IX |

<table>
<thead>
<tr>
<th>Potentially material patented technology or copyrighted items are known but an LOA or copyright release for some of the material(s) has NOT been obtained or presented to the committee.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask ISC for special permission to publish</td>
</tr>
<tr>
<td>Quit activity</td>
</tr>
<tr>
<td><strong>X</strong> Wait for LOA for patented technology or release of copyrighted items.</td>
</tr>
</tbody>
</table>

Motion by/2nd by Takuya Nagafuchi (Nihon Entegris) / Noritsugu Ishida (Swagelok)

Discussion None

Vote 5-1

Final Action X Motion Passed

Motion Failed

A&R | Not approved |
Reason:
5 Subcommittee & Task Force Reports

5.1 Diaphragm Valve Task Force
There has been no activity.

5.2 Welding Fitting Task Force
There has been no activity.

5.3 Liquid Filter Task Force
Takuya Nagafuchi (Nihon Entegris), the co-leader, reported that the task force examined the published patent applications which might be possible material to Document 5421A and determined that its use of the published patent application 2013-31835 is justified on technical grounds, as attached the meeting minutes of the Liquid Filter Task Force held on June 30, 2014.

Attachment: 03, 140630_LC_LF-TF_Meeting-Minutes

5.4 Liquid-borne Particle Counter Task Force
There has been no activity.

5.5 Ultrapure Liquid Evaluation Study Group
The co-leader, Kaoru Kondo (Rion), reported the activity of the study group as attached.

Attachment: 04, 140613_UPL-SG_Meeting-Minutes_Final

5.6 Liquid Chemicals ESD Study Group
The co-leader, Keiichi Yamakawa (Niho Gore), reported the activity of the study group as attached.

Attachment: 05, 1406304_LC-ESD_SG_Meeting-Minutes

6 Old Business
None

7 New Business
None

8 Action Item Review

8.1 Open Action Items
None

8.2 New Action Items
Chie Yanagisawa (SEMI Japan) reviewed the new action item. This can be found in the New Action Items table at the beginning of these minutes.

9 Next Meeting and Adjournment
The next meeting of the Japan Liquid Chemicals TC Chapter is scheduled for Wednesday, December 3 at SEMICON Japan 2014 at Tokyo Big Sight, Tokyo.

Having no further business, a motion was made by Hiroshi Tomita, co-chair, to adjourn the Japan Liquid Chemicals TC Chapter meeting at SEMI Japan office. The meeting unanimously adjourned at 17:00.
Respectfully submitted by:
Chie Yanagisawa
Sr. Coordinator, Standards & EHS
SEMI Japan
Phone: +81.3.3222.5863
Email: cyanagisawa@semi.org

Minutes approved by:
Hiroshi Tomita (Toshiba), Co-chair August 22, 2014
Hiroyuki Araki (Dainippon Screen Manufacturing), Co-chair August 22, 2014

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<td>01</td>
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<td>04</td>
<td>140613_UPL-SG_Meeting-Minutes_Final</td>
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<td>05</td>
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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 [SEMI Staff Name] at the contact information above.