**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title |  |
| Date Submitted | [2021-01-19] |
| Source | [Vinayagam Mariappan][SMR Automotive Modules Korea Ltd.][] | Voice: [+82 32 6507 785 ]Fax: [+82 32 6507 871 ]E-mail: [vinayagam@ieee org] |
| Re: | [TG7a November 2020 Meeting Minutes] |
| Abstract | [This document contains the TG7a Higher Rate, Longer Range Optical Camera Communications (OCC) meeting minutes for the November 2020 Electronic Plenary Session] |
| Purpose | [To provide minutes of the meeting for TG7a] |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. |

**Monday 6:00 PM ~ 8:00 PM, November 9, 2020**

Attendees:

1. Yeong Min Jang
2. Vinayagam Mariappan
3. Sangsung Choi
4. Md Faisal Ahmed
5. Van Hoa Nguyen
6. Huy Nguyen
7. Moh. Khalid Hasan
8. Md. Osman Ali
9. Cong Hoan Nguyen
10. And Five Members from Apple, etc.

Meeting called to order by the Chair Yeong Min Jang

Welcome \ Patent Policy presented by Chair

Agenda document presented by Chair

Call for Contributions and Agenda Approval (doc 15-20-0343r0)

Moved : Vinayagam Mariappan

Second: Sangsung Choi

Result: Approved unanimously

Contribution Presentations:

1. The rolling shutter effect in the image sensor by changing frequencies from the transmitter (333-00) by Md Faisal Ahmed
2. PHY Mode Categorization for IEEE802.15.7a High Data Rate OCC TG (320-02) by Vinayagam Mariappan
3. MIMO-COOK scheme based enhancing performance of OCC system (331-00) by Van Hoa Nguyen
4. Optical camera communication based temperature and humidity monitoring system (334-00) by Md Faisal Ahmed
5. Realtime data collection using OCC devices for eHealth applications (332-00) by Van Hoa Nguyen

Meeting recessed.

**Tuesday 6:00 PM ~ 8:00 PM, November 10, 2020**

Attendees:

1. Yeong Min Jang
2. Vinayagam Mariappan
3. Sangsung Choi
4. Md Faisal Ahmed
5. Van Hoa Nguyen
6. Huy Nguyen
7. Moh. Khalid Hasan
8. Md. Osman Ali
9. Cong Hoan Nguyen
10. And Five Members from Apple, etc.

Meeting called to order by the Chair Yeong Min Jang

Welcome \ Patent Policy presented by Chair

Agenda document presented by Chair

Call for Contributions and Agenda Approval (doc 15-20-0343r1)

Moved : Vinayagam Mariappan

Second: Sangsung Choi

Result: Approved unanimously

Contribution Presentations:

1. Potential of OCC for high speed V2V system (344-00) by Huy Nguyen
2. Requirements and challenges regarding OCC-based vehicular data transmission (346-00) by Moh. Khalid Hasan
3. Potential of Neural Network for Optical Camera Communication system (345-00) by Huy Nguyen
4. New packet architecture for hybrid OCC-LiFi system for indoor communications (347-00) by Moh. Khalid Hasan
5. High Mobility V2X PHY Functional Requirements for High Data Rate OCC (335-01) by Vinayagam Mariappan

Meeting recessed.

**Wednesday 6:00 PM ~ 8:00 PM, November 11, 2020**

Attendees:

1. Yeong Min Jang
2. Vinayagam Mariappan
3. Sangsung Choi
4. Md Faisal Ahmed
5. Van Hoa Nguyen
6. Huy Nguyen
7. Moh. Khalid Hasan
8. Md. Osman Ali
9. Cong Hoan Nguyen
10. And Five Members from Apple, etc.

Meeting called to order by the Chair Yeong Min Jang

Welcome \ Patent Policy presented by Chair

Agenda document presented by Chair

Call for Contributions and Agenda Approval (doc 15-20-0343r2)

Moved : Vinayagam Mariappan

Second: Sangsung Choi

Result: Approved unanimously

Contribution Presentations:

1. Monitoring management for e-Health purposes using OCC Technique (355-00) by Md. Osman Ali
2. Vehicular localization scheme based on optical camera communication (OCC) using single camera (356-00) by Cong Hoan Nguyen
3. Promising Solution for vehicle communication using Optical Camera Communication (354-01) by Md. Osman Ali
4. AI based channel estimation for vehicular optical camera communication (OCC) system (357-00) by Cong Hoan Nguyen

Affirmation of new officers for IEEE 802.15.7a TG

Vice Chairman: Sangsung Choi elected unanimously and approved

Secretaries: Vinayagam Mariappan elected unanimously and approved

Group approved to decide on Chief Technical Editor, Technical Editor, other Secretaries in future sessions.

unanimously approved on updating web page

Update draft CFA (Call for Applications)

Approve Schedule and milestone activities

Moved : Vinayagam Mariappan

Second: Sangsung Choi

Result: Approved unanimously

Discussed on Plan for January’2021 meeting and approved unanimously

3 slots (AM1 on Mon., Tue., and Wed.)

Presentation on Call for Applications

Meeting adjourned by Chair