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| Project | **HMD based 3D Content Motion Sickness Reducing Technology**<<http://sites.ieee.org/sagroups-3079/> **>** |
| Title | **Propose to new PAR of the ‘Mixed Reality Standard Framework for Motion Learning’** |
| DCN | **3079-20-0004-00-0000** |
| Date Submitted | **February 2, 2020** |
| Source(s) | **Jeong, Sangkwon Peter** ceo@joyfun.kr **(JoyFun)****Lee, Gookhwan** ghlee@joyfun.kr **(JoyFun)** |
| Re: |  |
| Abstract | This document is written in the form of the context required for the proposal of a new PAR. |
| Purpose | This document was submitted to propose a new PAR. |
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**PAR for a New IEEE Standard**

# Section 1

* 1. **Assigned Project Number**:

P3079.2

* 1. **Type of Document: *Standard, Recommended Practice, or Guide***

Standard

* 1. **Life Cycle: *Full Use or Trial Use***

Full Use.

# Section 2

**2.1 Project Title:**

Mixed Reality Standard Framework for Motion Learning

# Section 3

**3.1 Working Group: Human Factor for Immersive Content**

**3.2 Sponsoring Society and Committee:** C/SAB

[A listing of Sponsor P&Ps and Sponsor Scopes is available at <https://development.standards.ieee.org/pub/view-sponsor-pnps>]

**3.3 Joint Sponsor:** (chosen from drop down menu)

If you are not adding a joint sponsor to this project, you may leave this field blank.

# Section 4

**4.1 Sponsor Balloting Information: *Individual or Entity***

Individual

**4.2 Expected Date of Submission of Draft to the IEEE-SA for Initial Sponsor Ballot**

**Month: Dec. Year: 2021**

**4.3 Projected Completion Date for Submittal to RevCom**

**Month: Oct. Year: 2022**

# Section 5

**5.1 Approximate number of people expected to be actively involved in the development of this project:**

30

**5.2 Scope of the proposed standard:**

This standard is intended to provide a standard framework for mixed reality content aimed at effectively learning behavior. The scope of this standard includes the synchronization of the coordinate system that motion recognition sensors use to track a person's movement with the coordinate system that is represented to guide the movement. In addition, as well as input and output processes and application programming interfaces used for smooth implementation of the content may include vocabulary, requirements, and data formats.

**5.3 Is the completion of this standard contingent upon the completion of another standard? No**

**5.4 Will this document contain a Purpose clause? No**

**5.5 Need for the project:**

Recently, virtual reality and mixed reality have led to the development of many technologies. In addition, many content services using these technologies are being developed. In particular, mixed reality technology based on motion recognition is widely used as a tool for learning motion. For this purpose, it is necessary to synchronize the contents with the mixed reality device, and it is a very basic condition to be developed so that the data provided by the sensor can be well reflected in the contents. Thus, a standard framework standard for such mixed reality content is necessary. By using this standard framework, interoperability of mixed reality content for learning postures such as rhythms, sports, and games will be ensured to promote the realistic mixed reality industry and accelerate the development of technologies and services.

**5.6 Stakeholders for the standard:**

Content Providers, Manufacturers, Local Governments, Constructors, Real-Estate Developers, etc.

# Section 6

**6.1 Intellectual Property:**

**A. Is the Sponsor aware of any copyright permissions needed for this project? *No***

**B. Is the Sponsor aware of possible registration activity related to this project? *No***

# Section 7

**7.1 Are there other standards or projects with a similar scope? *No***

**7.2 Joint Development - Is it the intent to develop this document jointly with another organization? *No***

**7.3 International Standards Activities**

**A. Adoptions - Is there potential for this standard to be adopted by another organization?: *No***

**B. Harmonization - Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No**

**7.4 Does the sponsor foresee a longer term need for testing and/or certification services to assure conformity to the standard? *Yes***

**Additionally, is it anticipated that testing methodologies will be specified in the standard to assure consistency in evaluating conformance to the criteria specified in the standard? *No***

# Section 8

**8.1 Additional Explanatory Notes:**

**8.2 IEEE Code of Ethics**

**I acknowledge that I have read and I understand the** [**IEEE Code of Ethics**](http://www.ieee.org/portal/pages/iportals/aboutus/ethics/code.html)

**I agree to conduct myself in a manner that adheres to the IEEE Code of Ethics when engaged in official IEEE business.**