June 2010

Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [comment CID 802 and proposed resolution]
Date Submitted: [June 11. 2009]
Source: [Taehan Bae, Jaeseung Son, Sridhar Rajagopal (*), Richard Roberts(**)] Company [Samsung Electronics Co.,LTD (*), Intel Corporation (**)]
Address [Dong Suwon P.O. Box 105, 416 Maetan-3dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742 Korea (*), Hillsboro, OR 97124 USA (**)]
Voice:[82-31-279-7293], FAX: [82-31-279-5130], E-Mail:[taehan.bae@samsung.com]
Re: []

Abstract: [Proposed resolution about comment CID 802 and helping discussion]

Purpose: [Contribution to IEEE 802.15.7 TG-VLC]

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Comment CID 802 and proposed resolution & discussion

2010. 06.15

Samsung Electronics

Technical comment CID 802

From "15-10-0386-00-lb50 sorted combined comments taehan Bae

CID	Clause	Subcla use	Page	Line	Comment	SuggestedRemedy		Taehan's suggested remedy
802	7.6.11 .2		222		Disagreement with content of this paragraph because it does not take into consideration the possible use of	Modify this text as shown below When spatial reuse due to directional optics is not present, and when the VLC communication system uses the same time slot between the adjacent light sources or cells with multiple channel communication, and when multiple channels are supported by the PHY, The channel hopping should can be used. In order to avoid interference and increase system capacity, pre assigned hopping pattern should be adopted.	Bae-Pr	accept in principle: change one word, "and" to "or". When the VLC communication system uses the same time slot between the adjacent light sources or cells with multiple channel communication, the channel hopping should be used. In order to avoid interference and increase system capacity, pre assigned hopping pattern should be adopted. ==> When spatial reuse due to directional optics is not present, or when the VLC communication system uses the same time slot between the adjacent light sources or cells with multiple channel communication, and when multiple channels are supported by the PHY, channel hopping can be used. In order to avoid interference and increase system capacity, pre assigned hopping pattern should be adopted.

- "T-CID 802 work this via email postpone discussion until next conference call"
- From "15-10-0388-01-0007 Concall minutes may10-july10"

Suggested Remedy

Original Text	When the VLC communication system uses the same time slot between the adjacent light sour ces or cells with multiple channel communication, the -channel hopping- should -be used. In or der to avoid interference and increase system capacity, pre assigned hopping pattern should be adopted	Accept: the : Delete should change into <u>can</u>
Commenta tor's remedy	When spatial reuse due to directional optics is not present, and when the VLC communicat ion system uses the same time slot between the adjacent light sources or cells with multiple cha nnel communication, and when multiple channels are supported by the PHY, channel hoppi ng can be used. In order to avoid interference and increase system capacity, pre assigned hop ping pattern should be adopted.	Accept Sentences in red are ad ded by comment.
suggested remedy	If interference is being experienced from an adjacent light then hopping can be used to mitigate it. When spatial reuse due to directional optics is not present, and when the VLC communication system uses the same time slot between the adjacent light sources or cells with multiple channel communication, and when multiple channels are supported by the PHY, channel hopping <u>can</u> be used. In order to avoid interference and increase system capacity, pre- assigned hopping pattern should be adopted.	Accept: And add more sentences in blue to make it clear