Comments and Corrections

Correction to "Large Sets of Orthogonal Sequences Suitable for Applications in CDMA Systems"

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IN [1], at the end of page 3761, the following table should be inserted after "so that".

c	000	001	010	011	100	101	110	111
i_c	-	2	1	4	0	6	3	5

On page 3762, line 4-10 of the left column, it should read

$$\overline{f_{100}} = (++--++---+-+-+-+-++----+++--++--+)$$
$$\overline{f_{010}} = (+-+-+-+-++----+++--++--++---+-++-)$$
$$\overline{f_{001}} = (++----+++--++--++--+-++-+-+---+-+)$$
$$\overline{f_{110}} = (+--++--++--+-++-+-+---+-+++++----)$$
$$\overline{f_{011}} = (+--+-++-+-+---+-+++++----++--++--)$$
$$\overline{f_{111}} = (+-+--+-+++++----++--++--+-+-+-+-+-)$$
$$\overline{f_{101}} = (++++----++--++--+-+-+-+-+-++----++)$$

On line 8-12 of the right column on page 3762, it should read "Let $\mathcal{R}$ contain all the sets $S_{c,\alpha}$ (where $c \neq 011$ and $\alpha \neq 101$) such that

$$c + 011 \in \{\alpha + 101, v_1, v_2\},$$

where $\alpha + 101$, v_1 and v_2 are three clockwise consecutive vectors in the circle in Figure 1."

On line 17-24 of the right column on page 3762, it should read "For instance, starting with $(\alpha + 101, v_1, v_2) = (100, 010, 001)$, which implies $\alpha = 001$, we uniquely identify 3 vectors c so that $c + 011 \in \{100, 010, 001\}$, namely $c \in \{111, 001, 010\}$. Therefore, $S_{111,001}, S_{001,001}, S_{010,001} \in \mathcal{R}$. Continuing this way, by taking a new triple of clockwise consecutive vectors on the circle $(\alpha + 101, v_1, v_2) = (010, 001, 110)$ we would get three more sets $S_{c,111}$ that belong to $\mathcal{R}$."

For the assignment to regular hexagonal cells depicted in Fig. 2 (at the top of the left column on page 3763), the re-use distance is $4\sqrt{3}$, but not 8. An assignment with the re-use distance 8 is given in Fig. 1 above.

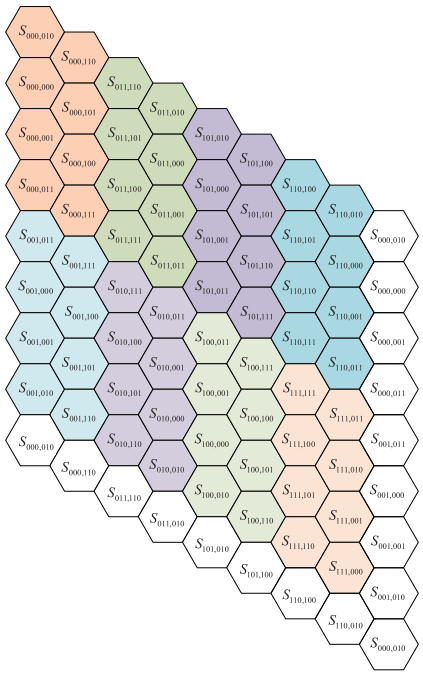

Fig. 1. Assignment of orthogonal sets to a lattice of regular hexagonal cells.

REFERENCES

[1] W. Zhang, C. Xie, and E. Pasalic, "Large sets of orthogonal sequences suitable for applications in CDMA systems," *IEEE Trans. Inf. Theory*, vol. 62, no. 6, pp. 3757–3767, Jun. 2016.

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