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**Kim et al.**

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(54) **RECEIVER METHOD AND APPARATUS FOR VARIABLE HEADER REPETITION IN A WIRELESS OFDM NETWORK**

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(51) **Int. Cl.**
***H01L 27/26*** (2006.01)
***H04L 27/26*** (2006.01)
***H04L 1/08*** (2006.01)

(52) **U.S. Cl.**
CPC ..... ***H04L 27/2601*** (2013.01); ***H04L 1/08*** (2013.01)

(58) **Field of Classification Search**
CPC .. H04B 1/38; H04B 7/00; H04B 7/155; H04J 1/00; H04J 3/00; H04J 3/24; H04J 11/00;
(Continued)

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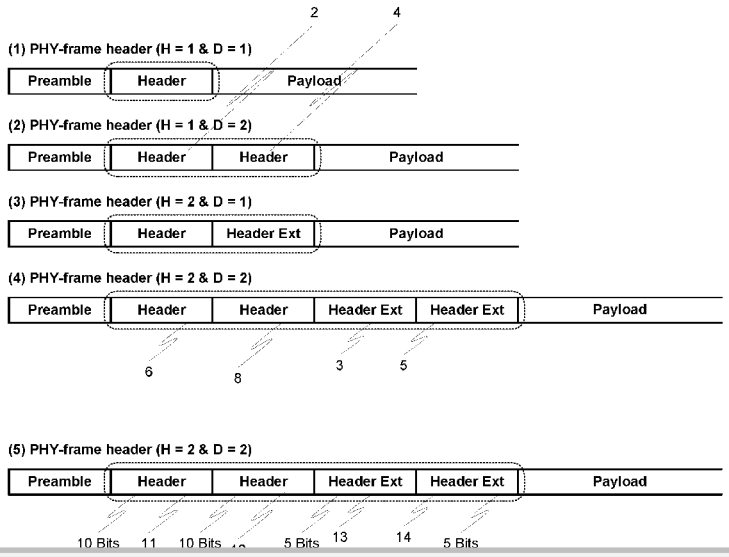
(57) **ABSTRACT**

A method and apparatus for use within a wireless OFDM network that receives a first packet type and a second packet type. The first packet type has a header field with two parts with each part comprising a different set of header bits. The two parts of the header field are received using two OFDM symbols. The second packet type has a header field with four parts with the first and second parts comprising the same first set of header bits and the third and the fourth part comprising the same second set of header bits. The four parts of the header field are received using four OFDM symbols. The second packet type provides more reliable reception than the first packet type.

**20 Claims, 8 Drawing Sheets**



**Related U.S. Application Data**

continuation of application No. 15/350,418, filed on Nov. 14, 2016, now Pat. No. 9,614,566, which is a continuation of application No. 13/376,856, filed as application No. PCT/US2010/046088 on Aug. 20, 2010, now Pat. No. 9,584,262.

(60) Provisional application No. 61/235,909, filed on Aug. 21, 2009.

(58) **Field of Classification Search**

CPC ..... H04L 1/00; H04L 1/08; H04L 5/00; H04L 12/26; H04L 12/43; H04L 12/54; H04L 12/56; H04L 12/403; H04L 27/28; H04W 4/00; H04W 24/00; H04W 52/02; H04W 72/04; H04W 72/12; H04W 74/08; H04M 1/00

USPC ..... 370/207, 229, 242, 252, 294, 328, 329, 370/330, 336, 338, 356, 389, 449, 474; 375/130, 219, 259, 260, 261, 267, 295, 375/316

See application file for complete search history.

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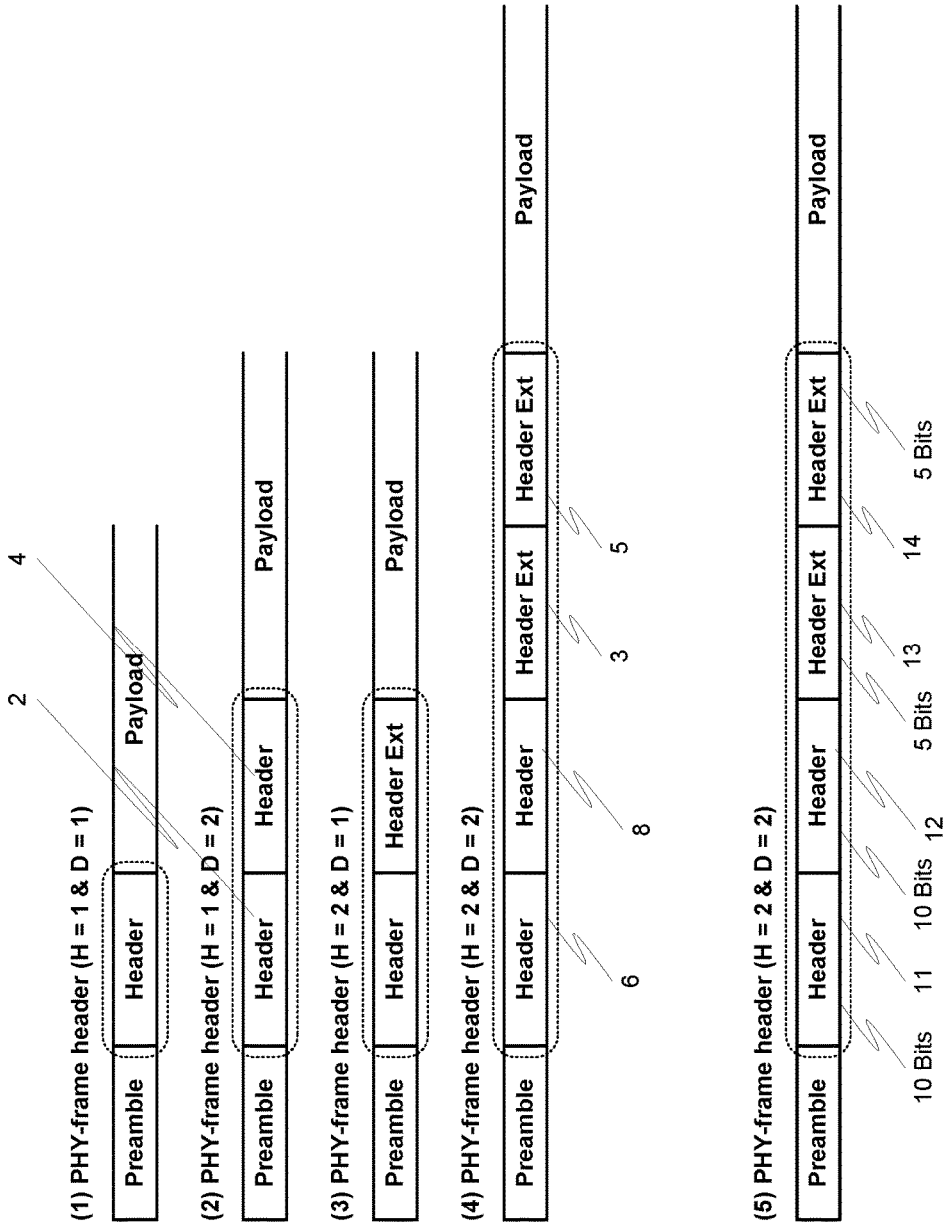


Fig. 1

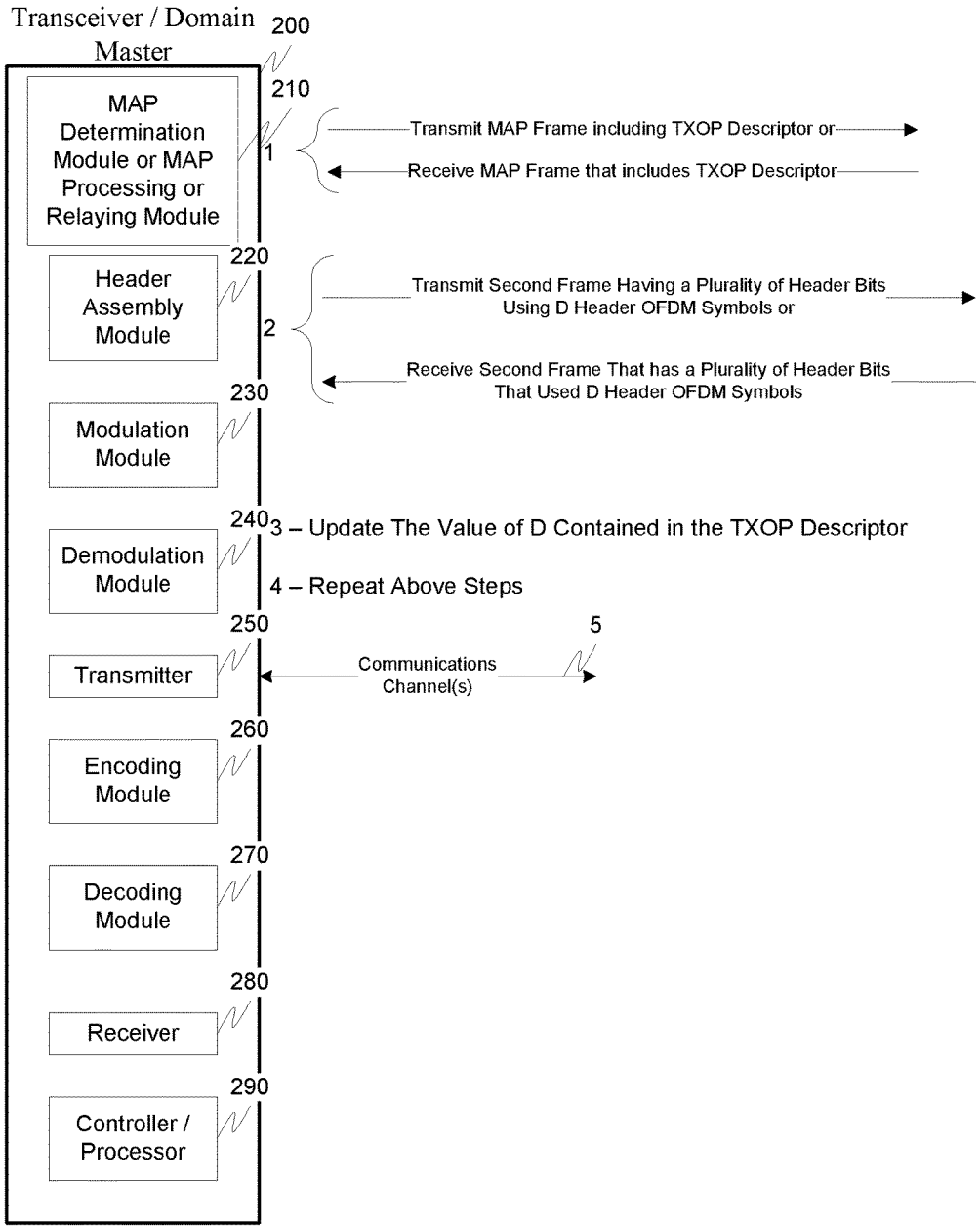


Fig. 2

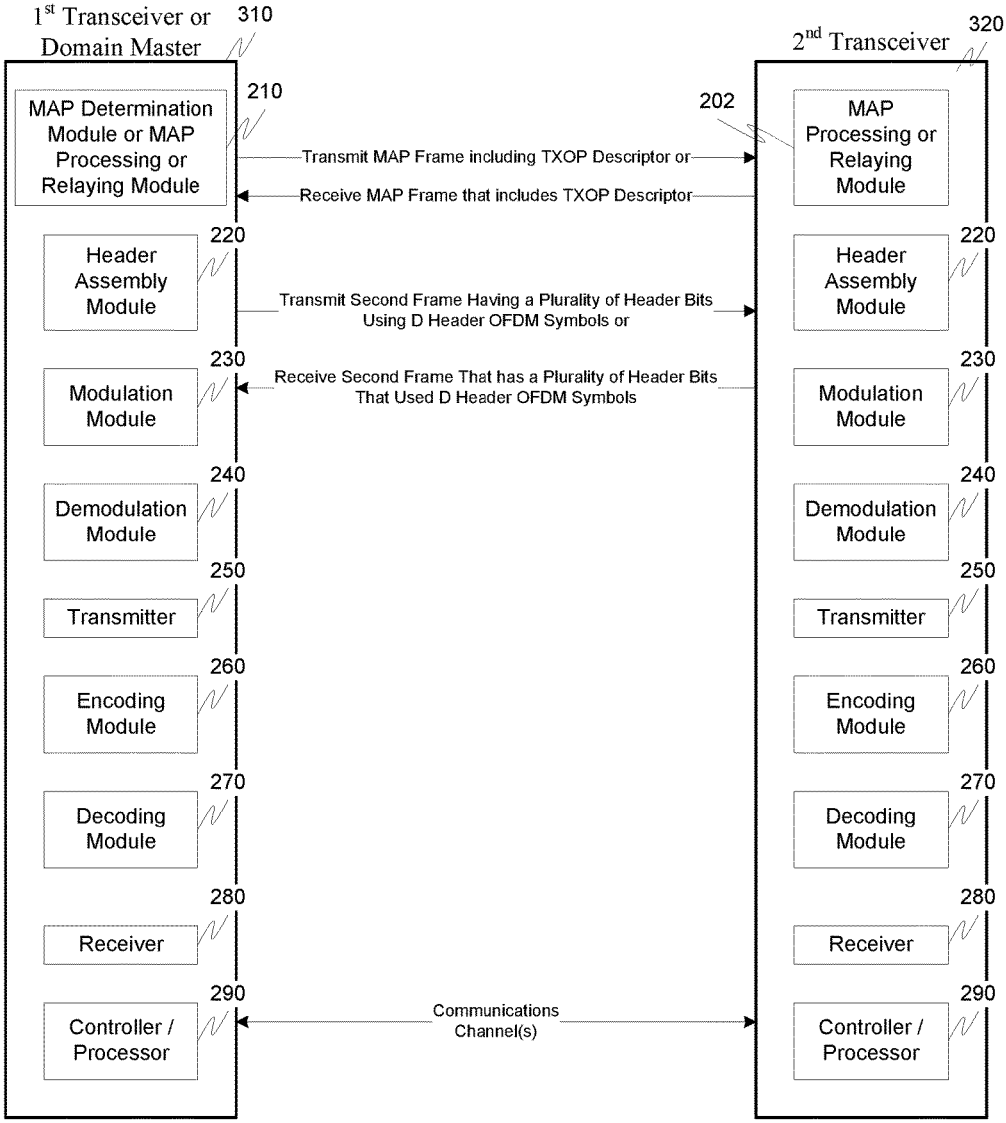


Fig. 3

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