

EXHIBIT C



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Trachewsky et al.

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(45) **Date of Reissued Patent:** **Jul. 6, 2021**

(54) **BACKWARD-COMPATIBLE LONG TRAINING SEQUENCES FOR WIRELESS COMMUNICATION NETWORKS**

(58) **Field of Classification Search**
CPC . H04L 27/2613; H04L 27/262; H04L 5/0048; H04L 25/0226; H04B 2201/70701; H04B 2201/70706
See application file for complete search history.

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Chicago, IL (US)

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“Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: High-speed Physical Layer in the 5 GHz Band,” IEEE Std 802. 11a-1999 (Supplement to IEEE Std 802.11-1999), Dec. 30, 1999, pp. 1-90, IEEE, United States.

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U.S. Applications:

(63) Continuation of application No. 11/188,771, filed on Jul. 26, 2005, now Pat. No. 7,646,703.
(60) Provisional application No. 60/634,102, filed on Dec. 8, 2004, provisional application No. 60/591,104, filed on Jul. 27, 2004.

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(51) **Int. Cl.**

H04L 27/26 (2006.01)
H04L 5/00 (2006.01)
H04L 25/02 (2006.01)

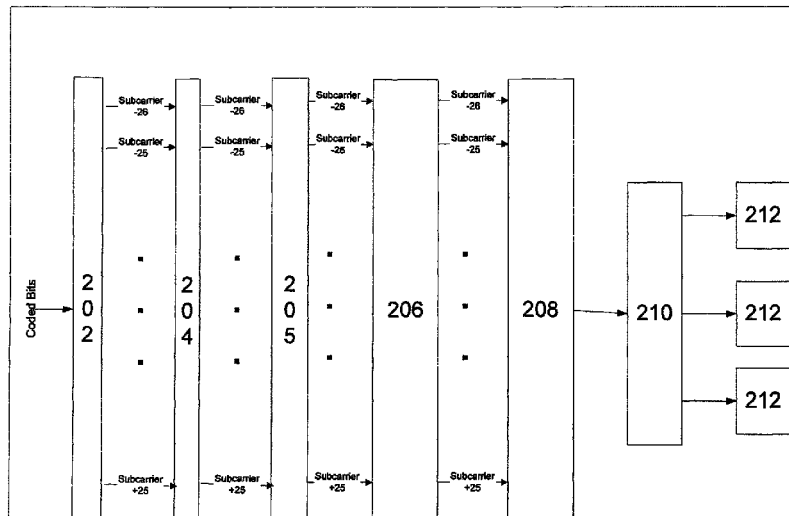
(57) **ABSTRACT**

A network device for generating an expanded long training sequence with a minimal peak-to-average ratio. The network device includes a signal generating circuit for generating the expanded long training sequence. The network device also includes an Inverse Fourier Transform for processing the expanded long training sequence from the signal generating circuit and producing an optimal expanded long training sequence with a minimal peak-to-average ratio. The expanded long training sequence and the optimal expanded long training sequence are stored on more than 52 sub-carriers.

(52) **U.S. Cl.**

CPC **H04L 27/2613** (2013.01); **H04L 27/262** (2013.01); **H04B 2201/70701** (2013.01); **H04B 2201/70706** (2013.01); **H04L 5/0048** (2013.01); **H04L 25/0226** (2013.01)

25 Claims, 5 Drawing Sheets



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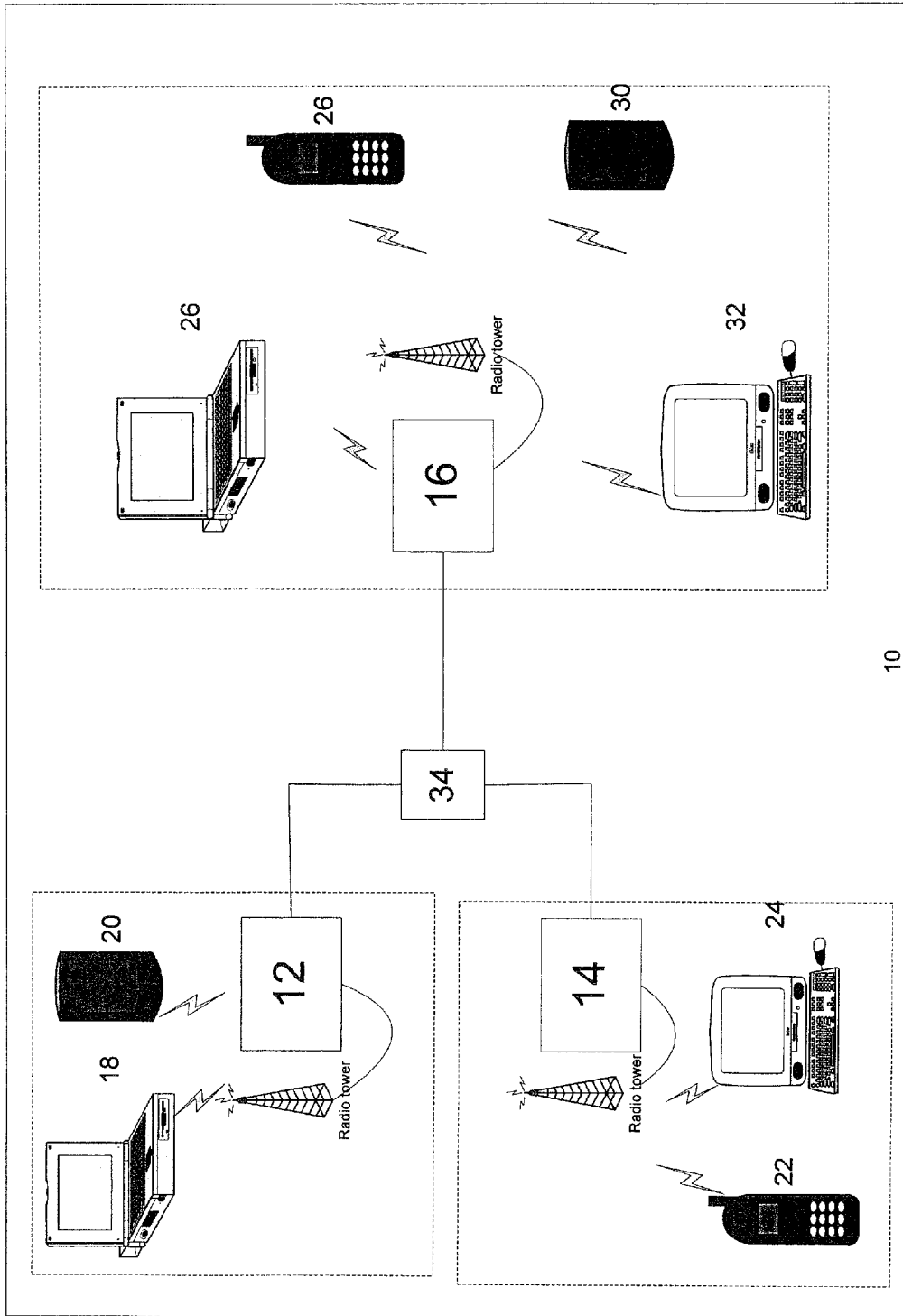
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Figure 1

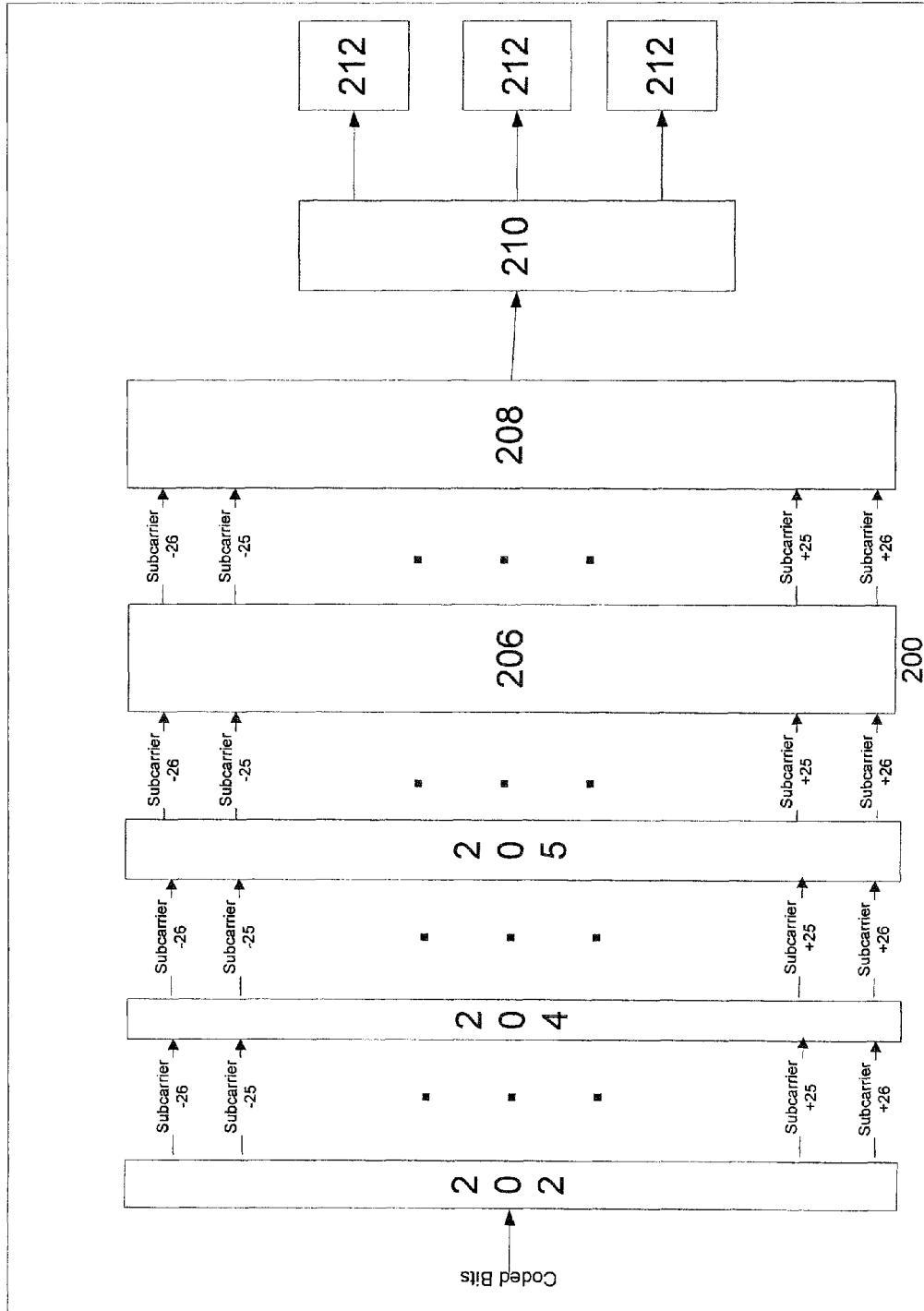


Figure 2

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