THE 11 CHIP BARKER SEQUENCE AND THE FCC RULES.

submission to IEEE 802.4L
Through-The-Air Token Bus Physical Layer

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1   The 11 chip Barker sequence and the FCC rules.

Document IEEE 802.4L/89-10 discusses, at that time, the current and projected FCC regulations on Direct Sequence Spread Spectrum regarding the length of the spreading code. No further FCC documentation was available at the moment of publication.
However, in August 1989, the FCC released document #89-354 entitled "Notice of Proposed Rule Making". A copy of this NPRM is appended to this document.
Under point 12 the possibility of using a spreading sequence shorter than 127, combined with a data scrambler, is explicitly discussed as an alternative.
Further the Appendix proposes an amendment to explicitly support the shorter spreading sequence, if properly combined with a data scrambler.

2   Conclusion

The 11 chip Barker sequence, if properly combined with a data scrambler, is in agreement with the present thoughts of the FCC about spreading.

3   References.

1) FCC DOC. 89-354   "Notice of proposed rule making"
                          Released : August 16, 1989

2) IEEE 802.4L / 89-10   "FCC rules on direct sequence spread
                          spectrum" - D.C. Johnson, July 1989