

# *Exhibit A*

RESTRICTED – ATTORNEYS EYES ONLY

**APPENDIX D: DSSS SIGNAL**

1. I understand that the Court has construed the term “random access signal” in claims 1, 2, 4, and 6–9 of the ’908 patent as “a direct sequence spread spectrum signal used as a random access signal.”

<b>E. “random access signal”</b>			
<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendants’ Proposal</u>	<u>Court’s Construction</u>
“random access signal”  '908 Patent: Claims 1, 2, 4, & 6–9	Plain and ordinary meaning. No construction necessary.	“direct sequence spread spectrum signal”	“a direct sequence spread spectrum signal used as a random access signal”

Dkt. No. 198 (“Claim Construction Order”) at 54.

2. I also understand that the Court has construed the term “probing signal” in claims 23, 24, 26, & 28 of the ’302 patent to mean “a direct sequence spread spectrum signal used as a probing signal.”

<b>I. “probing signal”</b>			
<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendants’ Proposal</u>	<u>Court’s Construction</u>
“probing signal”  '302 Patent: Claims 23, 24, 26, & 28	Plain and ordinary meaning. No construction necessary.	“direct sequence spread spectrum signal”	“a direct sequence spread spectrum signal used as a probing signal”

Claim Construction Order at 81.

RESTRICTED – ATTORNEYS EYES ONLY

3. I also understand the Court relied on the specification’s use of DSSS signal when providing this construction.

used as a random access signal.” Indeed, the specification only describes the random access signal as a direct sequence spread spectrum signal. In the section titled “Initial Random Access Using the Overlay Scheme,” the specification states that “FIG. 10 illustrates a DSSS signal used as initial random access by the mobile station MS<sub>j</sub> 1004, in an overlay system.” ’908 Patent at 8:34–35. Similarly, the specification states that the mobile station “sends an initial *random access signal over the DSSS channel* with a certain signature code or sequence.” ’908 Patent at 8:52–53 (emphasis added). In other words, the “random access signal” is “a direct sequence spread spectrum signal used as a random access signal.” ’908 Patent at 8:34–35.

Claim Construction Order at 57.

### 1. DSSS SIGNAL IN THE ASSERTED PATENTS’ SPECIFICATIONS

4. The shared specification of the ’908 Patent and ’302 Patent provides examples of a DSSS Signal used as a random access signal. For example:

When this mobile station powers up or wakes up from a sleep mode, it first listens to a base station broadcasting channel and finds an available random access DSSS channel. It then sends an initial random access signal over the DSSS channel with a certain signature code or sequence that is designated to the corresponding base station and is broadcasted to all the mobile stations by each base station.

’908 patent 8:49–55.

RESTRICTED – ATTORNEYS EYES ONLY

5. The shared specification of the '908 Patent and '302 Patent provides examples of a DSSS Signal used as a probing signal.

The information from the DSSS receiver **920** will then be used to decode the mobile station's signature in the case of initial random access; to derive the channel information in the case of channel probing; or to decode the information bit in the case of short messaging.

'908 patent 5:35–39.

In one embodiment, the base station dictates the mobile station to transmit the channel probing DSSS when it needs an update of the mobile station's channel characteristics. In

'908 patent 9:62–64

6. A person of ordinary skill in the art understands that probing signals do not contain any information. Instead, probing signals are typically used for channel probing. This understanding is reflected in several publications such as the following excerpts:

7. The shared specification of the '908 Patent and '302 Patent provides embodiments where the DSSS signal is an unmodulated DSSS sequence or a DSSS sequence modulated by one.

8. For example, the specification provides an embodiment where the DSSS signal is formed from modulating a DSSS sequence with information bits that are always one.

RESTRICTED – ATTORNEYS EYES ONLY

Unlike a typical CDMA system where the signals are designed to be orthogonal in the code domain or an OFDM system where the signals are designed to be orthogonal in frequency domain, the embodiments of this invention overlay the MC signal, which is transmitted without or with very low spreading, and the DSSS signal, which is transmitted at a power level lower than that of the MC signal.

In accordance with aspects of certain embodiments of this invention, the MC signal is modulated on subcarriers in the frequency domain while the DSSS signal is modulated by

the information bits or symbols in the time domain. In some cases the information bits modulating the DSSS sequence are always one.

*See, e.g.*, '908 patent at 2:58–3:3.

9. As another example, the specification provides an embodiment where the DSSS signal is formed from an unmodulated DSSS sequence where the modulation symbol is one.

In another embodiment, the MC signal is modulated on subcarriers in the frequency domain while the DSSS signal is modulated in either the time domain or the frequency domain. In one embodiment the modulation symbol on the DSSS sequence is one and the sequence is unmodulated.

*See, e.g.*, '908 patent at 4:58–62.

10. Thus, a person of ordinary skill in the art would understand that a DSSS signal includes unmodulated DSSS sequences or DSSS sequences modulated by one.

11. Moreover, in implementation, there is no difference between transmitting or receiving an unmodulated DSSS sequence and a DSSS sequence modulated with information bits of one.

## 2. DSSS SEQUENCE IN THE ASSERTED PATENTS' SPECIFICATIONS

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.