FARNAN LLP

April 7, 2016

VIA E-FILING
The Honorable Leonard P. Stark
J. Caleb Boggs Federal Building
844 N. King Street
Unit 26, Room 6124
Wilmington, DE 19801-3556

Re: ***Intellectual Ventures I/II LLC, et al. v. AT&T, Cricket, T-Mobile, Sprint, U.S. Cellular*** **(C.A. Nos. 13-cv-1668, 13-cv-1669, 13-cv-1670, 13-cv-1671, 13-cv-1672, 14-cv-1229, 14-cv-1230, 14-cv-1231, 14-cv-1232, 14-cv-1233)**

Dear Chief Judge Stark:

The parties submit this joint letter pursuant to the Court's oral Order, given at the end of the April 4 *Markman* hearing. The Court instructed the parties to submit a joint proposal for briefing the parties' proposed constructions for the preamble term "frequency hopping" as it appears in the 408 Patent, in the event the Court finds that preamble term to be limiting. The Court also asked that the parties provide a concise statement of the claim terms that the parties still need the Court to construe, and to state whether any agreement could be reached as to the construction of the "module operative to recognize" (claim 17) and the "identifying means" (claim 20) in the `248 Patent. The parties have met and conferred, and provide this joint letter with the information the Court has requested.

A. Briefing Proposal for "Frequency Hopping"

The parties propose the following briefing schedule for their respective constructions of the term "frequency hopping":

- On Monday, April 11, the parties shall exchange their respective proposals for how the phrase "frequency hopping" should be construed if the Court finds it is a limitation;
- On Tuesday, April 12, the parties shall meet and confer regarding their proposed constructions, and exchange their final proposed constructions by 9:00pm Eastern Time
- On Monday, April 18, the parties shall file their respective opening briefs with the Court, which shall be no longer than four pages, double-spaced; and
- On Monday, April 25, the parties shall file their respective answering briefs with the Court, which shall be no longer than four pages, double-spaced.

B. Terms Needing Construction

The parties believe the Court should construe the following eighteen terms from the list of 24 terms that have been prioritized for construction at this time:

No.	Patent	Term(s)
1.	'831 Patent	"signal dropout characteristics"
2.	'831 Patent	"encoding packets into packet blocks"
3.	'831 Patent	"an encoder for combining and varying the number of packets transmitted in each of the patent blocks"
4.	'431 Patent	"primary preamble sufficient to enable radio operations"
5.	'431 Patent	"an autocorrelation having a large correlation peak with respect to sidelobes; a cross-correlation with other primary preambles having a small crosscorrelation coefficient with respect to power of other primary preambles; and a small peak-to-average [power] ratio; and wherein a large number of primary preamble sequences exhibit the properties"
6.	'431 Patent	"wherein the core-band is substantially centered at an operating center frequency"
7.	'408 Patent	"frequency hopping"
8.	'408 Patent	"a structure for allocating ones of baseband outputs from a digital channelizer to ones of logical inputs of digital signal processors and allocating ones of baseband inputs of a digital combiner to ones of logical outputs of said digital signal processors according to said mapping signal"
9.	'248 Patent	"application-aware resource allocator at the MAC layer" / "application-aware media access control (MAC) layer"
10.	'248 Patent	"allocating resources" / "allocating bandwidth resource" / "allocates resources"
11.	'248 Patent	"a module operative to recognize an application type of said software application associated with said IP flow"
12.	'248 Patent	"identifying means for identifying an application type of a software application associated with an IP flow"
13.	'248 Patent	"allocating means for allocating resources to said IP flow . . . so as to optimize end user application IP QoS requirements of said software application"
14.	'994 Patent	"means for allocating a tier of service for each of a plurality of individual packet data queues, wherein the means for allocating allocates different weights to each tier of service based on a number of users requiring access to the available communication resource"
15.	'994 Patent	"means for determining a total number of data packets that can use an available communication resource"
16.	'994 Patent	"means . . . for allocating a proportion of said total number of data

No.	Patent	Term(s)
		packets to a number of the tiers of service to allow individual packet data queues on a number of tiers to share a communication resource"
17.	'994 Patent	"scheduling means to provide said communication resource to queued packet data users on a tier-by-tier basis, such that said resource is made available to all tiers"
18.	'994 Patent	"allocating a proportion of said total number of data packets to a number of the tiers of service to allow individual packet data queues on a number of tiers to share a communication resource"

C. Agreement as to Construction of "Module Operative to Recognize" (claim 17) and "Identifying Means" (claim 20)

The parties are discussing whether they can reach agreement on the proposed construction of this term and will advise the Court if they are able to do so.

Respectfully submitted,

/s/ Brian E. Farnan

Brian E. Farnan

cc: All counsel of record (via E-File)