

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Emerson Electric Co.,  
Petitioner

v.

SIPCO, LLC,  
Patent Owner

Case IPR2015-01579  
U.S. Patent 6,914,893

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SIPCO, LLC'S PATENT OWNER PRELIMINARY RESPONSE  
PURSUANT TO 37 C.F.R. § 42.107(a)

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## I. INTRODUCTION

The Board should deny the present request for *inter partes review* of U.S. Patent No. 6,914,893 (“the ‘893 patent”) because there is not a reasonable likelihood that the Petitioner would prevail at trial with respect to at least one claim of the ‘893 patent for four separate and independent reasons.

First, each of the Petitioner’s proposed grounds of rejection is missing one or more limitations of the claims of the ‘893 patent.<sup>1</sup> For example, neither Kahn nor Kantronics discloses a “*scalable address*” even under Petitioner’s own proposed construction of that claim limitation as “an address that has a variable size based on the size and complexity of the system.” Neither reference discloses *an address having a variable size*; each reference instead discloses *a variable number of addresses*.

The claim limitation “scalable address” appears in each independent claim of the ‘893 patent that was challenged by the Petitioner. Also, the Petitioner proposed only anticipation rejections against all the independent claims. Moreover, the Petitioner did not assert that a secondary reference from its proposed obviousness rejection discloses the limitation that is missing from both Kahn and Kantronics. Accordingly, there is not a reasonable likelihood

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<sup>1</sup> *Infra*, §§ V.A.2 and V.B.2-8.

that the Petitioner will prevail at trial on any claim of the '893 patent because neither Kahn nor Kantronics discloses the claimed "scalable address."

Second, the Board has already considered and rejected many of Petitioner's arguments in a previous *inter partes* review (*i.e.*, IPR2015-00659) against a related patent (*i.e.*, U.S. Patent 7,697,492). For example, the Board ruled in that IPR that the very same AX.25 packet relied upon in this proceeding by the Petitioner, does not contain a "scalable address."<sup>2</sup> The Board also ruled that the control field of the AX.25 packet relied upon in this proceeding by the Petitioner, does not disclose a packet including a "command indicator comprising a command code" as recited in Claim 1 and Claim 37. Rather, the Board concluded that "the record is at best unclear as to how commands are sent by Kantronics"<sup>3</sup>

Third, the Petitioner did not present any objective evidence as to why one of ordinary skill in the art would have been able to combine the various portions of the references to achieve the particular preformatted message structure comprising a "scalable address" and a "command indicator comprising a command code," as disclosed and claimed in the '893 patent.

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<sup>2</sup> IPR2016-00659, Decision Denying Institution, Paper No. 13, pp. 6-7.

<sup>3</sup> IPR2015-00659, Decision Denying Institution, Paper No. 13, p. 9.

Rather, the message structure taught by the prior art references Kahn and Kantronics includes a variable number of addresses rather than a scalable address. That is, the Petitioner did not show that a “skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.”<sup>4</sup> The Board has consistently declined to institute proposed grounds of rejections in IPR proceedings when the Petition fails to identify any objective evidence such as experimental data, tending to establish that two different structures can be combined to achieve the claimed invention with a reasonable expectation of success.<sup>5</sup> Here, the Petitioner did not set forth any such objective evidence.<sup>6</sup> For this additional reason, there is not a reasonable likelihood that the Petitioner will prevail at trial with respect to at least one claim of the ’893 patent.

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<sup>4</sup> *OSRAM Sylvania, Inc. v. Am Induction Techs., Inc.*, 701 F.3d 698, 706 (Fed. Cir. 2012).

<sup>5</sup> *Epistar, et al. v. Trustees Of Boston University*, IPR2013-00298, Decision Not To Institute, Paper No. 18 (P.T.A.B. November 15, 2103).

<sup>6</sup> *See e.g.*, Petition, pp. 20-54.

Fourth, the Petitioner neglected to follow the legal framework for an obviousness analysis set forth long ago by the Supreme Court.<sup>7</sup> That framework requires consideration of the following factors: (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. The Board has previously warned that failure to identify differences between the cited art and the claims is a basis for denying a petition:

A petitioner who does not state the differences between a challenged claim and the prior art, and relies instead on the Patent Owner and the Board to determine those differences based on the rest of the submission in the petition risks having the corresponding ground of obviousness not included for trial for failing to adequately state a claim for relief.<sup>8</sup>

The Petitioner ignored the Board's warning by failing to identify the differences between the challenged claim and the prior art. That is, the

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<sup>7</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *see also KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 399 (2007) (“While the sequence of these questions might be reordered in any particular case, the [Graham] factors define the controlling inquiry.”)

<sup>8</sup> *Liberty Mutual v. Progressive Casualty*, CMB-2012-00003, paper 7 at 2 – 3.



Petitioner failed to identify the claim limitations that it believed are missing from the primary reference (*i.e.*, Kahn) and are instead taught by the secondary references (*e.g.*, Kantronics, the admitted prior art).<sup>9</sup> Rather, Petitioner provided a description of each reference followed by a conclusory statement that the reference taught certain claim limitations, leaving the Board to figure out whether the primary or secondary reference best teaches the claim limitation.<sup>10</sup> Under this circumstance, it would be “inappropriate for the Board to take the side of the Petitioner to salvage an inadequately expressed ground ...”<sup>11</sup> For this additional reason, *inter partes* review based on obviousness should be denied.<sup>12</sup>

For the reasons mentioned above as explained more fully below, the Petitioner failed to show that it is reasonably likely to prevail. Accordingly, the Board should deny the Petition.

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<sup>9</sup> Petition, pp. 20-54.

<sup>10</sup> *Id.*

<sup>11</sup> *Liberty Mutual v. Progressive Casualty*, CBM-2012-00003, paper 7 at 2 – 3; paper 8 at 14-15.

<sup>12</sup> *See infra*, § VI.B.1.

## II. TECHNOLOGY BACKGROUND

### A. Conventional Control and Monitoring Systems

“[C]ontrol systems utilize computers to process system inputs, model system responses, and control actuators to implement process corrections within the system. Both the electric power generation and metallurgical processing industries have had success controlling production processes by implementing computer controlled control systems in individual plants.”<sup>13</sup>

A conventional “approach to implementing control system technology is to install a local network of hard-wired sensors and actuators along with a local controller.”<sup>14</sup> As shown in FIG. 1 of the ’893 patent, a conventional, “prior art control system 100 includes a plurality of sensor actuators 111, 112, 113, 114, 115, 116, and 117 electrically coupled to a local controller 110. In a manner well known in the art of control systems, local controller 110 provides power, formats and applies data signals from each of the sensors to predetermined process control functions, and returns control signals as appropriate to the system actuators.”<sup>15</sup>

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<sup>13</sup> Exhibit 1001, ’893 patent, col. 1, ll. 43-48.

<sup>14</sup> *Id.* at col. 1, ll. 58-60.

<sup>15</sup> *Id.* at col. 2, ll. 1-8.

With the conventional approach, however, “[t]here are expenses associated with developing and installing the appropriate sensor(s)/actuator(s) and connecting functional sensor(s)/actuator(s) with the local controller. Another prohibitive cost of control systems is the installation and operational expenses associated with the local controller.”<sup>16</sup> Moreover, “[p]rior art control systems similar to that of FIG. 1 require the development and installation of an application-specific local system controller. In addition, each local system requires the direct coupling of electrical conductors to each sensor and actuator to the local system controller.”<sup>17</sup> Because of these characteristics, “prior art control systems often are susceptible to a single point of failure if local controller 110 goes out of service. Also, appropriately wiring an existing industrial plant can be a dangerous and expensive proposition.”<sup>18</sup>

Accordingly, there existed a need to overcome the shortcomings of the prior art with an alternative solution for remote monitoring and control.<sup>19</sup>

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<sup>16</sup> *Id.* at col. 1, ll. 60-65.

<sup>17</sup> *Id.* at col. 2, ll. 14-18.

<sup>18</sup> *Id.* at col. 2, ll. 21-25.

<sup>19</sup> *Id.* at col. 2, ll. 28-31.

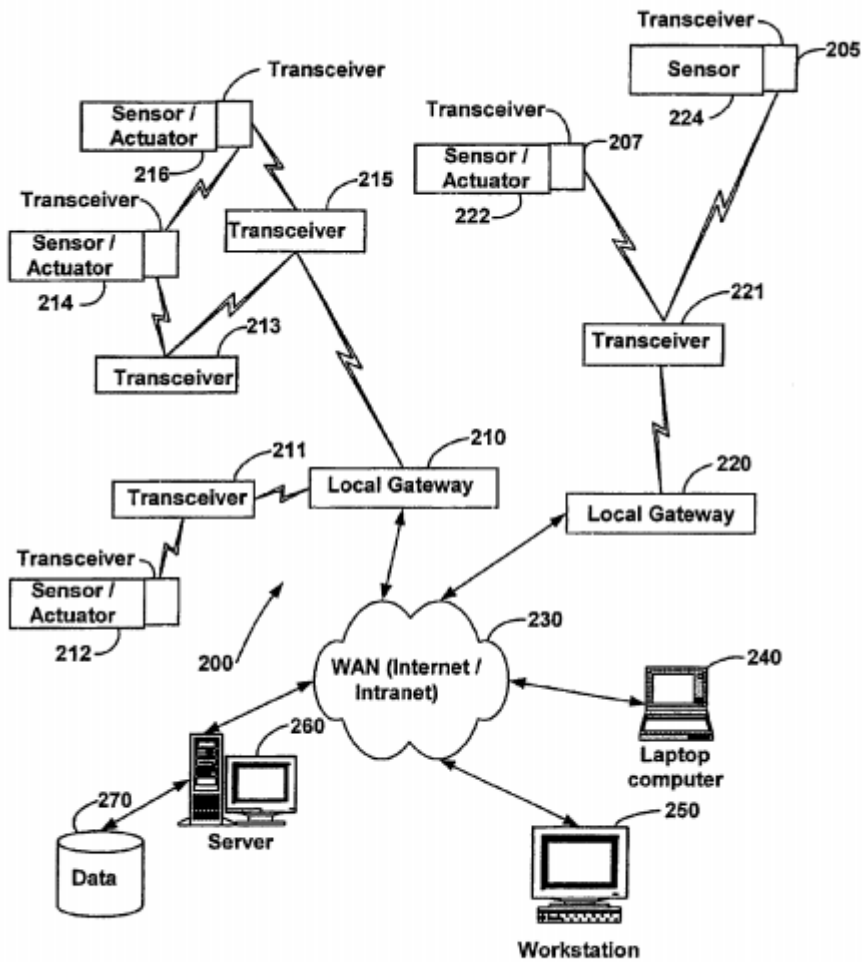
**B. The '893 Patent: Thomas D. Petite Invents A New Type Of System For Remote Monitoring and Control.**

To solve the problems associated with the prior art systems, the inventor of the '893 patent created a new “computerized system for monitoring and controlling remote devices by transmitting data between the remote systems and a gateway interface via a packet message protocol system.”<sup>20</sup> FIG. 2, reproduced below, illustrates an embodiment of “a control system in accordance with the present invention.”<sup>21</sup>

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<sup>20</sup> *Id.* at Abstract.

<sup>21</sup> *Id.* at col. 3, ll. 35-37.



**FIG. 2**

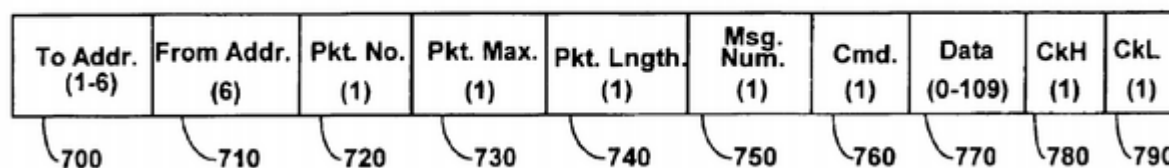
“The control system 200 may consist of one or more transceivers. An exemplary transceiver 205 can be integrated with a sensor 224 to form a first combination. A second transceiver 207 can be integrated with an actuator 222 to form a second combination. The transceivers 205, 207 may preferably be

wireless RF transceivers that are relatively small in size and transmit a relatively low power RF signal.”<sup>22</sup>

“The local gateway 210 acts as the local communications master in a system. With the exception of emergency messages, the local gateway 210 usually initiates communications with any remote transceivers (either stand-alone 211, 213, 215, 221 or integrated 212, 214, 216, 224). The remote transceivers then respond based upon the command received in the message. In general, the local gateway 210 expects a response to all messages sent to any of the remote transceivers 211, 212, 213, 214, 215, 216, 221, and 225.”<sup>23</sup>

FIG. 7, which is reproduced below, “sets forth a format of the data packet protocol of the present invention.”<sup>24</sup>

**FIG. 7 Message Structure**



<sup>22</sup> *Id.* at col. 3, ll. 37-43.

<sup>23</sup> *Id.* at col. 12, ll. 45-54.

<sup>24</sup> *Id.* at col. 10, ll. 24-25.

As shown by FIG. 7 above, “messages transmitted within the system consist of a “to” address 700, a “from” address 710, a packet number 720, a number of packets in a transmission 730, a packet length 740, a message number 750, a command number 760, any data 770, and a check sum error detector (CKH 780 and CKL 790).”<sup>25</sup> The command number 760 is “the command byte 760 that requests data from the receiving device as necessary”<sup>26</sup> The “to” address, which identifies the intended recipient of a message, is scalable because it has a variable size:

The “to” address 700 indicates the intended recipient of the packet. This address can be scalable from one to six bytes based upon the size and complexity of the system.<sup>27</sup>

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<sup>25</sup> *Id.* at col. 10, ll. 25-30.

<sup>26</sup> *Id.* at col. 10, ll. 66-67.

<sup>27</sup> *Id.* at col. 11, ll. 33-44.

FIG. 8, which is reproduced below, “sets forth one embodiment of the  
“to” address byte assignment”<sup>28</sup>

**FIG. 8**

<u>"To Address"</u>	<u>Byte Assignment:</u>
<b>MSB - Byte 1</b> <b>Device Type</b>	<b>FF-F0 (16) - Broadcast All Devices (1 Byte Address)</b> <b>EF-1F (224) - Device Type Base (2 to 6 Byte Address)</b> <b>0F-00 (16) - Personal Transceiver Identification (6 Byte Address)</b>
<b>Byte 2</b> <b>Mfg./Owner</b> <b>ID</b>	<b>FF-F0 (16) - Broadcast all Devices (Byte 1 Type)</b> <b>(2 Byte Broadcast Address)</b> <b>EF-00 (240) - Mfg./Owner Code Identification Number</b>
<b>Byte 3</b> <b>Mfg./Owner</b> <b>Extension ID</b>	<b>FF-F0 (16) - Broadcast all Devices (Byte 1 &amp; Byte 2 Type)</b> <b>(3 Byte Broadcast Address)</b> <b>EF-00 (240) - Device Type/Mfg./Owner Code ID Number</b>
<b>Byte 4</b>	<b>FF-F0 (16) - Broadcast all Devices (Byte 1 &amp; Byte 2 Type)</b> <b>(4 Byte Broadcast Address)</b> <b>EF-00 (240) - ID Number</b>
<b>Byte 5</b>	<b>(FF-00) 256 - Identification Number</b>
<b>Byte 6</b>	<b>(FF-00) 256 - Identification Number</b>

“In this individual example, the “to” address consists of six bytes. The first byte (Byte 1) can indicate the device type. The second byte (Byte 2) can indicate the manufacturer or the owner. The third byte (Byte 3) can be a further indication of the manufacturer or owner. The fourth byte (Byte 4) either

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<sup>28</sup> *Id.* at col. 11, ll. 66-67.



indicates that the message is for all devices or that the message is for a particular device. If the message is for all devices, the fourth byte will be a particular code. If the message is for a particular device, the fourth, fifth, and sixth bytes (Byte 5 and Byte 6) are the unique identifier for that particular device.”<sup>29</sup>

### **III. SUMMARY OF THE PETITIONER’S PROPOSED GROUNDS FOR REVIEW**

For the Board’s convenience, below is a summary (as understood by Patent Owner) of the claim rejections proposed by the Petitioner:

1. Claims 1, 2, 10, and 37 of the ’893 Patent are alleged to be anticipated by Kahn.
2. Claim 10 of the ’893 Patent is alleged to be obvious under 35 U.S.C. § 103(a) over Kahn in view of Kantronics and the admitted prior art.
3. Claims 1, 2, 10, and 37 of the ’893 Patent are alleged to be anticipated by Kantronics.

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<sup>29</sup> *Id.* at col. 12, ll. 3-13.

#### **IV. CLAIM CONSTRUCTION.**

The Patent Owner need not set forth any claim construction because there is not a reasonable likelihood that the Petitioner will prevail on any proposed ground of rejection against any claim even under the Petitioner's own claim construction.

#### **V. THE SCOPE AND CONTENT OF THE PRIOR ART.**

For a reference to anticipate a claim, "there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention."<sup>30</sup> Any obviousness analysis requires a consideration of the scope and content of the prior art and the differences between the prior art and the claims.<sup>31</sup>

The Petitioner proposed anticipation and obviousness rejections based on Kahn and Kantronics, which are summarized below.

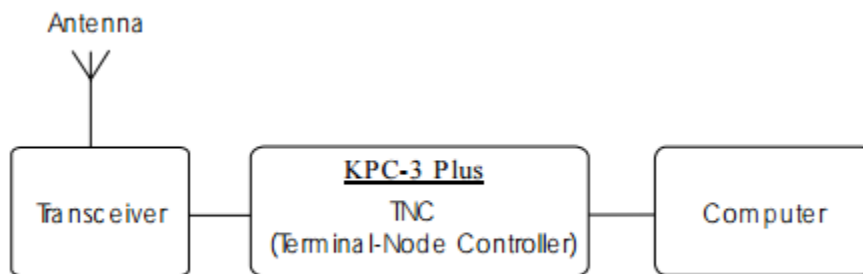
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<sup>30</sup> *Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991).

<sup>31</sup> See MPEP § 2141.01, 2141.02.

**a. Kantronics (Ex. 1003).**

The Kantronics reference is a user guide for a terminal node controller called the Kantronics KPC-3 Plus, which operates within a packet radio station.<sup>32</sup> Kantronics provides an illustration of a packet radio station, which is reproduced below<sup>33</sup>:



As shown in the figure above, a packet radio station has three main components:

- a transceiver, with an antenna,
- a device called a TNC (i.e., Terminal Node Controller), which is a combination modem and special-purpose micro-computer, and
- a general purpose computer (or a terminal).<sup>34</sup>

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<sup>32</sup> Kantronics, Exhibit 1003, p. 11.

<sup>33</sup> *Id.* at p. 19.

<sup>34</sup> *Id.* at p. 18.

The transceiver “(1) sends and receives radio signals to and from your antenna and (2) passes audio signals back and forth between itself and the TNC.”<sup>35</sup>

The Terminal Node Controller TNC “(1) translates audio signals into digital information and vice versa, (2) performs a number of control and information storage functions, and (3) communicates digitally with your computer.”<sup>36</sup>

“The computer communicates digitally with the TNC, so you can: (1) view messages received from the transceiver or stored in a mailbox (*i.e.*, PBBS), (2) use the computer to send data to, and receive data from, other stations, via the TNC and your transceiver, and (3) control the operation of the TNC.”<sup>37</sup>

Kantronics illustrates remote control and sensing from one TNC/radio stations in a figure,<sup>38</sup> which is reproduced below:

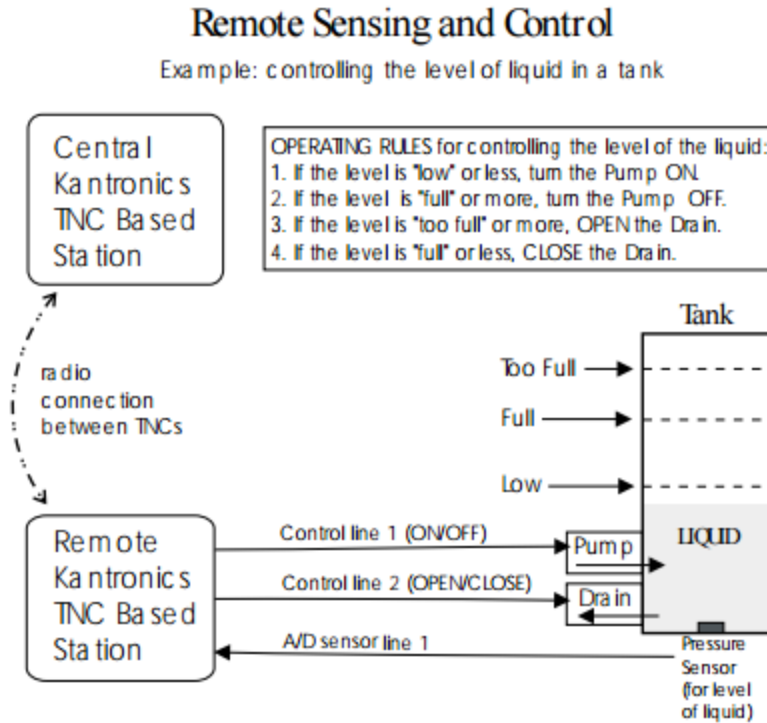
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<sup>35</sup> *Id.* at p. 19.

<sup>36</sup> *Id.*

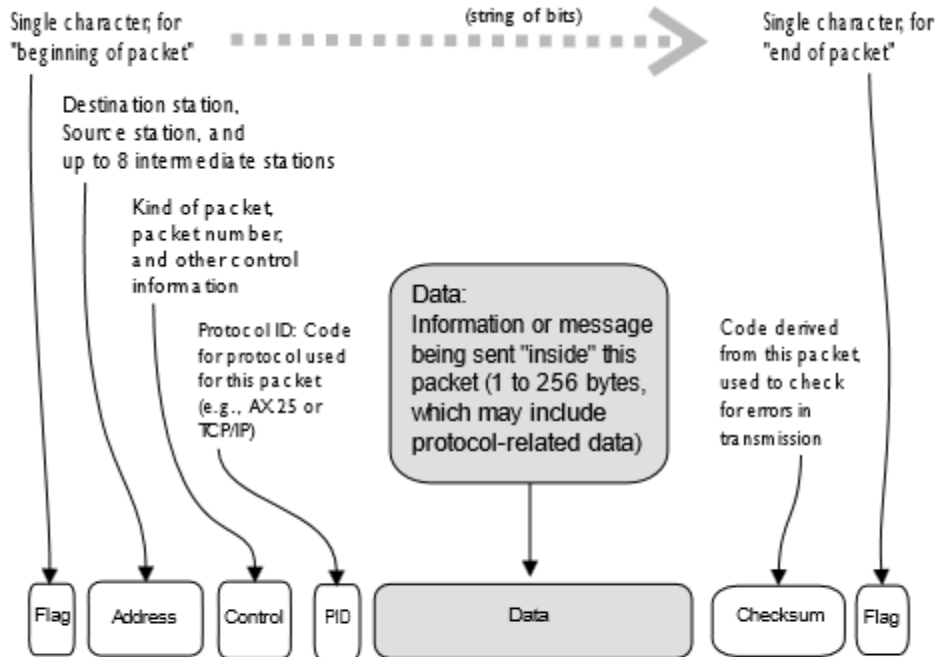
<sup>37</sup> *Id.*

<sup>38</sup> Kantronics, Exhibit 1003, p. 167.



As illustrated by the figure above, the remote station sends commands to the tank on wired lines (i.e., Control lines 1 and 2) and receives data pressure from the tank on another wired line (i.e., A/D sensor line 1). The remote station communicates with a central station via a radio connection using "Connected Information Packets" defined by the AX.25 protocol. The Connected Information Packet format is shown in a figure<sup>39</sup> which is reproduced below:

<sup>39</sup> Kantronics, Exhibit 1003, p. 27.



© Copyright 1996 by Kantronics Co., Inc.

### The Organization of an AX.25 Connected Information Packet

The AX.25 Connected Information Packet includes, among other fields, an Address field comprising the addresses of the destination stations, source stations, and up to 8 intermediate stations; and a Control field comprising a kind of packet number and other control information.

#### **b. Kahn (Ex. 1002).**

Kahn discusses "the basic concepts of packet radio ... and present[s] the recent technology and system advances in this field. Various aspects of spread spectrum transmission in the network environment are identified and our experience with a testbed network in the San Francisco Bay area is

discussed.”<sup>40</sup> Kahn explains that “[i]n a point-to-point routing procedure, a packet originating at one part of the network proceeds directly through a series of one or more repeaters until it reaches its final destination. The point-to-point route (which consists of an ordered set of selectors) is first determined by a station which is the only element in the net that knows the current overall system connectivity.”<sup>41</sup> Kahn further explains that “it may still be desirable to carry along within each data packet the selector for the next downstream repeater, or even the next few repeaters.”<sup>42</sup> In other words, Kahn discloses that a packet may contain many selectors (e.g., addresses) of the repeaters along the path from the source of a message to a destination. Kahn does not state that any of these addresses have a length that varies or is scalable.<sup>43</sup>

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<sup>40</sup> Exhibit 1002, Kahn, Abstract.

<sup>41</sup> *Id.* at p. 1479.

<sup>42</sup> *Id.*

<sup>43</sup> *See id.*

**VI. PETITIONER DID NOT DEMONSTRATE THAT IT IS MORE  
LIKELY THAN NOT TO PREVAIL ON ANY CHALLENGED CLAIM  
OF THE '893 PATENT.**

*Inter partes* review cannot be instituted unless the Board determines that the Petition demonstrates that there is a reasonable likelihood Petitioner will succeed in establishing that at least one of the claims challenged in the Petition is unpatentable.<sup>44</sup>

Here, the Board should decline to institute an *inter partes* review on either of the two proposed anticipation grounds because the Petitioner did not show that Kahn or Kantronics discloses all of the limitations of any of the challenged claims.

The Board should decline to institute an *inter partes* review on the combination of prior art for the proposed obviousness grounds because (i) the Petitioner failed to set forth a proper obviousness analysis because it did not identify the claim limitations that it believed are missing from the primary reference (i.e., Kahn) and are instead taught by the secondary references (e.g., Kantronics, the admitted prior art), (ii) the Petition failed to demonstrate that one of ordinary skill in the art would have been motivated to combine the teachings of the numerous prior art references in the combination to achieve

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<sup>44</sup> 37 C.F.R. § 42.108(c).



the claimed invention with a reasonable expectation of success, (ii) the Petition failed to demonstrate that any of the different combinations teaches every element of any of the challenged claims.

**A. The Petitioners Failed To Demonstrate That Claims 1, 2, 10, and 37 Are Anticipated By Kahn (Ground 1).**

“A claim is anticipated only if *each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.*”<sup>45</sup> “The *identical invention must be shown in as complete detail as is contained in the . . . claim.*”<sup>46</sup> Accordingly, “there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.”<sup>47</sup> The Petitioners failed to show that any claim of the '893 Patent is anticipated by Kahn because it

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<sup>45</sup> *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) (emphasis added), *see also* MPEP § 2131.02.

<sup>46</sup> *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) (emphasis added).

<sup>47</sup> *Scripps Clinic & Research Found v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991).

failed to show that Kahn discloses all the limitations of any challenged claim as explained in detail below.

**1. Kahn Does Not Disclose “a scalable address,” As Recited In Independent Claim 1, And As Similarly Recited In Independent Claim 37**

The Petitioner argued that Kahn discloses “a scalable address” because “each packet in Kahn includes a destination identifier ... the destination identifier is part of the packet’s header, which is disclosed as being variable in length”<sup>48</sup> and “[a] packet can include the destination identifier for a single packet radio unit or for multiple packet radio units in the route from the source to the destination (in either a route setup packet or otherwise).”<sup>49</sup> That is, the Petitioner argued that Kahn discloses a “scalable address” of at least one of the intended transceivers (i.e., destination) because a packet in Kahn can include an address for each radio unit in the route between the sending unit and the ultimate destination unit.<sup>50</sup> However, Kahn clearly states that such field in the packet is *not* a destination address but rather a “point-to-point route” that is

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<sup>48</sup> Petition, p. 20.

<sup>49</sup> Petition, p. 20.

<sup>50</sup> *See id.*

composed of multiple addresses: a source transceiver address, a destination transceiver address, and the address of each repeater in between:

“In the point-to-point routing procedure, a packet originating at one part of the network proceeds directly through a series of one or more repeaters until it reaches its final destination. *The point-to-point route (which consists of an ordered set of selectors)* is first determined by a station which is the only element in the net that knows the current overall system connectivity. Having determined a good point-to-point route, where should the station send the point-to-point routing information? One possibility is for it to distribute the information to the individual repeaters along the point-to-point route. In this case, each succeeding packet would only require some form of source and/or destination identifier but would not have to carry the entire route in its header. Alternatively, the station can send it directly to the digital section of the sender's (or receiver's) packet radio. In this case, each packet originating at that radio could then contain the entire set of selectors in its header.”<sup>51</sup>

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<sup>51</sup> Exhibit 1002, Kahn, p. 1497.

Obviously, such route would vary in length based on the number of repeaters between the source and destination. However, Kahn does not disclose that any of the addresses that make up the route varies in size.

Furthmore, the challenged independent claims *do not recite that the number of addresses in a packet varies*; they instead *recite that the size of the address varies*. Indeed, Petitioner’s own construction of “scalable address” requires “an address that has a variable size based on the size and complexity of the system.”<sup>52</sup> And the Petitioner did not even allege that the size of any of the addresses in Kahn’s packet varies.<sup>53</sup> Indeed, there is no indication in Kahn that the size of any of the addresses in the packet varies.<sup>54</sup>

The addresses disclosed in the ’893 patent, in sharp contrast to those addresses disclosed in Kahn, are scalable because a different number of bytes are used in the message to represent addresses of different lengths: “[T]he “to” address 700 indicates the intended recipient of the packet. This address can be scalable from one to six bytes based upon the size and complexity of the system..” Exhibit 1001, ‘893 patent, col. 10, ll. 31-33. That is, the address

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<sup>52</sup> *Id.* at p. 6.

<sup>53</sup> *See id.*

<sup>54</sup> Exhibit 1002, Kahn, p. 1497.

disclosed in the '893 patent is scalable because its length varies with the number of bytes that are needed to represent a value for the address. The address disclosed in Kahn is not scalable because its length does not vary with the number of bytes that are needed to represent an address's value.

Moreover, the Board has ruled in a previous *inter partes* review (i.e., IPR2015-00659, the '659 IPR) against a related patent (i.e., U.S. Patent 7,697,492) that an address must have a variable size in order to meet the claimed "scalable address" limitation. IPR2016-00659, Decision Denying Institution, Paper No. 13, pp. 6-7. In the '659 IPR, the Board rules that a fixed length address did not qualify to be a "scalable address" merely because the fixed length address was padded with ASCII spaces when all the bits of the address were not needed. *Id.* Here, the Board should rule that two or more fixed length addresses do not become a "scalable address" when they are placed in the same packet.

Because Kahn does not disclose the claimed "scalable address," the Petitioner did not show that it is more likely than not that Kahn anticipates independent claim 1, independent claim 37, or any of the challenged claims dependent therefrom (i.e., claims 2 and 10).

**2. Kahn Does Not Disclose A “controller being in communications with each of the plurality of transceivers ... the controller communicating via preformatted messages ... the preformatted messages comprises at least one packet, wherein the packet comprises: a receiver address ... sender address ... a command indicator comprising a command code ... at least one data value ... and an error detector,” As Recited In Independent Claim 1 And As Similarly Recited In Independent Claim 37**

Kahn does not disclose the claim limitation quoted above because it does not disclose a preformatted message having a packet including a command indicator comprising a command code along with the other recited items. The Petitioner’s argument for this claim limitation fails because it refers to data in the packet instead of a command (i.e., an instruction). For example, the Petitioner argued that “information in the packet header causes the unit that receives the packet to perform different actions depending on the content of that information. For example, a packet radio unit, upon correct receipt of a packet, processes the header to determine if it should relay the packet, deliver it to an attached device, or discard it.”<sup>55</sup> In the Petitioner’s example, however, the packet sent to the packet radio unit does not contain an instruction to relay, deliver, or discard the packet; the packet radio unit is not told what to do with the packet. Rather, the packet radio unit determines what to do with the packet itself based on data or information in the packet. Thus, the packet in

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<sup>55</sup> Petition, p. 21.

the Petitioner's example contains data (i.e., information); it does not contain a command (i.e., instruction) as required by this claim limitation.

The Petitioner also asserted that “[a] packet radio unit that receives a route setup packet from another packet radio unit performs specific actions (extracts renewal table information from a list of selectors in the packet and writes it into the renewal table) when it detects this special bit in the packet header.”<sup>56</sup> But the route setup packet in Kahn does not contain an instruction to perform a specific action such as to extract renewal table information or write to a renewal table; the route setup packet does not instruct the packet radio unit. Rather, the packet radio unit determines what specific actions to perform itself based on data (i.e., information) in the packet. Thus, the route setup packet contains only data (i.e., information); it does not contain a command (i.e., instruction) as required by this claim limitation.

Moreover, the Petitioner's argument with respect to the X-RAY debugger fails because it does not show that the X-RAY debugger uses a command indicator comprising a command code along with a receiver address, a sender address, a data value, and an error detector are in the same

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<sup>56</sup> Petition, p. 22.

packet, as required by this claim limitation.<sup>57</sup> More particularly, the Petitioner asserted that “Fig. 8 [of Kahn] shows the structure of the packets that comprise the preformatted messages.”<sup>58</sup> The Petitioner also referred to the packet illustrated at Fig. 15.<sup>59</sup> But the Petitioner did not demonstrate — and Kahn does not disclose — that the X-RAY debugging is in the packet shown in Fig. 8.<sup>60</sup>

For this additional reason, Kahn does not anticipate independent claims 1 or 37 or any of the challenged claims dependent therefrom (*i.e.*, claims 2 and 10).

**3. Kahn Does Not Disclose A “controller sends preformatted command messages via the controller transceiver, and the plurality of transceivers send preformatted response messages”  
As Recited In Independent Claim 1**

Kahn does not disclose the claim limitation quoted above because it does not disclose a preformatted command message or preformatted response

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<sup>57</sup> See *id.* at pp. 21-22.

<sup>58</sup> Petition, p. 19.

<sup>59</sup> *Id.* at p. 22.

<sup>60</sup> See Petition, pp. 21-22; Exhibit 1002, Kahn, p. 1494.



message. The Petitioner asserted that “the station uses command messages to initiate the X-RAY process and command the remote devices to report the contents (or at least selected contents) of their memories (via response messages)”<sup>61</sup>. But Kahn does not disclose such command messages that instruct remote devices to report the contents of their memories or selected contents via response messages.

Furthermore, the Petitioner asserts that messages sent by one packet radio to another through intermediate packet radios (i.e. repeater) “are effectively commands requesting that a packet be sent to the next packet radio unit along the route”<sup>62</sup> and that acknowledgement messages that are sent by intermediate packet radios to confirm the successful receipt of such messages are “preformatted response message” to the alleged “command messages”. However, messages disclosed in Kahn do not include commands from sender packet radio (i.e. source) instructing intermediate packet radios (i.e. repeaters) where or how to forward messages as alleged by the Petitioner. Instead, such messages include routing control information that are processed and used by

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<sup>61</sup> Petition, p. 24.

<sup>62</sup> *Id.* at p. 24.

an intermediate packet radio to decide itself where and how to forward each message.

“A user generated packet with associated addressing and control information in the packet header is input to the digital section of his packet radio, which adds some network routing and control information and passes the packet to the radio section for transmission to a nearby repeater which is identified within the packet. Upon correct receipt of the packet, the nearby repeater processes the header to determine if it should relay the packet, deliver it to an attached device, or discard it.”<sup>63</sup>

Furthermore, acknowledgment messages disclosed in Kahn are not response message to command messages as alleged by the Petitioner. Instead, an acknowledgment message is sent by a packet radio merely to confirm the receipt of one or more messages. Such acknowledgment messages are sent to confirm the receipt of all kinds of messages regardless of their content (command or otherwise). For the reasons mentioned above, Kahn does not anticipate Claim 1 or any of the challenged claims dependent therefrom (*i.e.*, claims 2 and 10).

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<sup>63</sup> Exhibit 1002, Kahn, p. 1477.

**4. Kahn Does Not Disclose “a sensor detecting a condition and outputting a sensed data signal to the transceiver controller” As Recited In Dependent Claim 2 And As Similarly Recited In Dependent Claim 10**

Kahn does not disclose the claim limitation quoted above because it does not disclose a particular device (i.e., a sensor) that both i) detects a condition and ii) outputs a sensed data signal to the transceiver controller. The Petitioner asserted that “packet radio units and stations in Kahn have built-in ‘measurement facilities’ that ‘provide for the collection and delivery of measurement data over the radio channel in real-time while an experiment is being run.’”<sup>64</sup> But the mere disclosure of these measurement facilities in Kahn does not indicate that a sensor both detects a condition and outputs a sensed data signal to the transceiver controller. Rather, Kahn’s measurement facilities could simply measure and display a value to a user, who could then manually enter the data into the system for transmission. That is, a sensor that detects a condition and outputs a sensed data signal is not necessarily present in the measurement facilities of Kahn.

Furthermore, the measurements disclosed in Kahn are not the claimed conditions detected by a sensor; they are merely network statistics that are produced by counting packets and their time of arrival. For example, Kahn

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<sup>64</sup> Petition, pp. 25-26, *quoting* Kahn, Ex. 1002, p. 1495.

explicitly states that “[n]o additional hardware is needed to make measurements on throughput, delay and several other parameters.”<sup>65</sup> Kahn further clearly describes the measurement tools as:

“The four primary measurement tools that have been developed are: cumulative statistics (CUMSTATS), snapshots, pickup packets, and neighbor tables, CUMSTATS consist of a variety of activity counters in each node. Snapshots periodically record the disposition of packet buffers and other node resources. Pickup packets are "crates" that start out empty at a traffic source, and pick up information at each node they traverse enroute to their destination, thus providing a trace of their history. Neighbor tables are a table of counts of packets received from each "neighbor" PR in range”<sup>66</sup>

For the reasons mentioned above, Kahn does not anticipate Claims 2 or 10.

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<sup>65</sup> Exhibit 1002, Kahn, p. 1495.

<sup>66</sup> Exhibit 1002, Kahn, p. 1495.

**B. The Petitioners Failed To Demonstrate That Claims 1, 2, 10, and 37 Are Anticipated By Kantronics (Ground 3).**

As explained above, a claim is anticipated only if *each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.*<sup>67</sup> “The *identical invention must be shown in as complete detail as is contained in the . . . claim.*”<sup>68</sup> The Petitioner failed to show that any claim of the '893 Patent is anticipated by Kantronics because it failed to show that Kantronics discloses all the limitations of any challenged claim as explained in detail below.

**1. Kantronics Does Not Disclose “a scalable address,” As Recited In Independent Claim 1, And As Similarly Recited In Independent Claim 37**

The Petitioner argued that Kantronics discloses “a scalable address” because “the packet depicted on p. 27 of Kantronics has an address section that includes the destination station and up to 8 intermediate stations.”<sup>69</sup> That is,

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<sup>67</sup> *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) (emphasis added), *see also* MPEP § 2131.02.

<sup>68</sup> *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) (emphasis added).

<sup>69</sup> Petition, p. 44.

the Petitioner argued that the Kantronics packet can include an address for each radio unit in the route between the sending unit and the ultimate destination unit.<sup>70</sup>

But the challenged independent claims do not recite that the number of addresses in a packet varies; they instead recite that the size of the address varies. Indeed, Petitioner's own construction of "scalable address" requires "an address that has a variable size based on the size and complexity of the system."<sup>71</sup> And the Petitioner did not even allege that the size of any of the addresses in the Kantronics packet varies.<sup>72</sup> Indeed, there is no indication in Kantronics that any of the addresses in the packet varies or is scalable.<sup>73</sup> In particular, the figure in Kantronics referenced by the Petitioner (reproduced below) illustrates a packet in which the number of addresses may vary depending on how many addresses are specified for the intermediate stations between the source station and the destination:

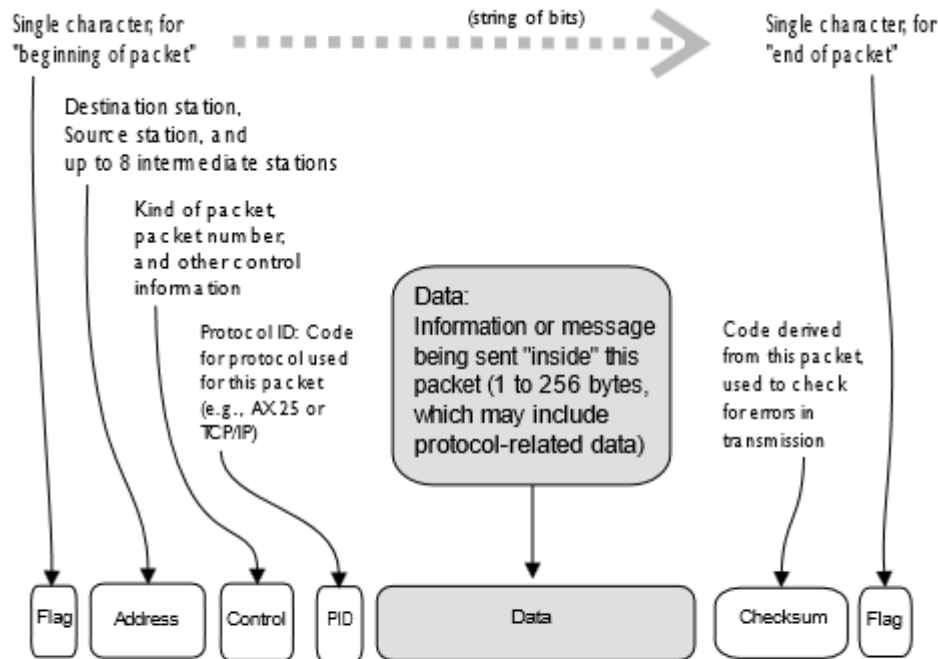
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<sup>70</sup> *See id.*

<sup>71</sup> *Id.* at p. 6.

<sup>72</sup> *See id.*

<sup>73</sup> Exhibit 1003, Kantronics, p. 27.



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#### The Organization of an AX.25 Connected Information Packet

The figure above indicates that a portion of the AX.25 packet contains addresses for the source station, the destination station, and up to eight intermediate stations. That is, the number of addresses in the packet vary with the number of intermediate stations lying between the source and destination station. Kantronics does not disclose, however, that the size of any of the addresses in the packet varies.<sup>74</sup>

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<sup>74</sup> *Id.*

The addresses disclosed in the '893 patent, in sharp contrast to those addresses disclosed in Kantronics, are scalable because a different number of bytes are used in the message to represent a particular address: “[T]he ‘to’ address 700 indicates the intended recipient of the packet. This address can be scalable from one to six bytes based upon the size and complexity of the system.” Exhibit 1001, ‘893 patent, col. 10, ll. 31-33. That is, the address disclosed in the ‘893 patent is scalable because its length varies with the number of bytes that are needed to represent a value for the address. The address disclosed in Kantronics is not scalable because its length does not vary with the number of bytes that are needed to represent an address’s value.

Moreover, the Board has ruled in a previous *inter partes review* (i.e., IPR2015-00659, the ‘659 IPR) against a related patent (i.e., U.S. Patent 7,697,492) that the very same AX.25 packet relied upon in this proceeding by the Petitioner, does not contain a “scalable address.”<sup>75</sup> In the ‘659 IPR, the Board ruled that the fixed length addresses in the AX.25 packet did not qualify to be a “scalable address.” Here, the Board should consistently rule that the same AX.25 packet referenced by Kantronics does not contain a “scalable address.”

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<sup>75</sup> IPR2016-00659, Decision Denying Institution, Paper No. 13, pp. 6-7.



Because Kantronics does not disclose a “scalable address,” the Petitioner did not show that it is more likely than not that Kantronics anticipates independent claim 1, independent claim 37, or any of the challenged claims dependent therefrom (i.e., claims 2 and 10).

**2. Kantronics Does Not Disclose A “controller being in communications with each of the plurality of transceivers ... the controller communicating via preformatted messages ... the preformatted messages comprises at least one packet, wherein the packet comprises: a receiver address ... sender address ... a command indicator comprising a command code ... at least one data value ... and an error detector,” As Recited In Independent Claim 1 And As Similarly Recited In Independent Claim 37**

Kantronics does not disclose the claim limitation quoted above because it does not disclose a preformatted message having a packet including a command indicator comprising a command code along with the other recited items. The Petitioner’s argument for this claim limitation fails because it refers to data in the packet instead of a command (i.e., an instruction). For example, the Petitioner argued that if a receiving station “is required to retransmit the packet (this determination is based on finding its own station ID in the list, and verifying that any previously-listed stations have already retransmitted the packet), it will retransmit.”<sup>76</sup> In the Petitioner’s example, however, the packet

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<sup>76</sup> Petition, p. 45.

sent to the receiving station does not contain an instruction to retransmit the packet; the receiving station is not told what to do with the packet. Rather, the receiving station determines what to do with the packet itself based on data or information in the packet. Thus, the packet in the Petitioner's example contains data (i.e., information); it does not contain a command (i.e., instruction) as required by this claim limitation.

Moreover, the Petitioner's argument with respect to control of a pump and drain fails for three reasons. First, the CNTL command mentioned by the Petitioner is not disclosed anywhere in Kantronics.<sup>77</sup> Second, the "poll command" mentioned by the Petitioner is not a "command indicator comprising a command code" as claimed in independent 1 and as similarly claimed in independent claim 37 because Kantronics does not disclose a command sent in a packet along with a receiver address, a sender address, a data value, and an error detector as required by claims 1 and 37.<sup>78</sup> Third, the CTRL command of Kantronics is also not the claimed "command indicator comprising a command code." In particular, Kantronics at page 199 discloses a CTRL command that "causes the KPC-3 Plus to activate the specified output

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<sup>77</sup> Exhibit 1003, Kantronics, pp. 1-300.

<sup>78</sup> *See id.* at p. 45.

line (A or B) to the radio port as indicated.” In other words, the commands identified in Kantronics by the Petitioner are specified by a user of a TNC, not generated by the TNC.<sup>79</sup> And the Petitioner provided no objective evidence that a command specified by the user is put into a data field of a packet.<sup>80</sup>

Furthermore, the Petitioner cited the packet depicted on p. 27 of Kantronics and asserted that the control section of the packet “corresponds to the claimed command indicator.”<sup>81</sup> But Kantronics at page 27 displays a schematic of an AX.25 information packet and states that a “‘control’ field in an AX.25 packet includes a code telling what kind of packet the current packet.”<sup>82</sup> That is, the control field of the AX.25 packet identifies the kind of packet and therefore, is clearly not a “command indicator,” as recited in Claim 1 and Claim 37.

The Petitioner failed to identify any portion of Kantronics that teaches a command indicator comprising a command code as part of a data message.

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<sup>79</sup> See *e.g.*, Exhibit 1003, Kantronics, p. 27.

<sup>80</sup> See Petition, p. 45.

<sup>81</sup> Petition, p. 45.

<sup>82</sup> Kantronics, Exhibit 1003, p.27

Furthermore, the Board has ruled in a previous *inter partes review* (i.e., IPR2015-00659, the ‘659 IPR) against a related patent (i.e., U.S. Patent 7,697,492) that the very control field of the AX.25 packet depicted on page 27 of Kantronics and other teachings of Kantronics relied upon in this proceeding by the Petitioner, do not disclose a packet including a “command indicator comprising a command code” as recited in Claim 1 and Claim 37. In IPR2015-00659, the Board concluded that “the record is at best unclear as to how commands are sent by Kantronics”<sup>83</sup>

For these additional reasons, Kantronics does not anticipate independent claims 1 or 37 or any of the challenged claims dependent therefrom (i.e., claims 2 and 10).

**C. The Petitioner Failed To Demonstrate That It Is More Likely Than Not To Prevail On Its Proposed Obviousness Rejection Of Claim 10**

As set forth by the Supreme Court, the question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *see also KSR Int’l Co. v.*

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<sup>83</sup> IPR2015-00659, Decision Denying Institution, Paper No. 13, p. 9.

*Teleflex Inc.*, 550 U.S. 398, 399 (2007) (“While the sequence of these questions might be reordered in any particular case, the [Graham] factors define the controlling inquiry.”) A petitioner seeking to invalidate a patent as obvious must demonstrate that a “skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.”<sup>84</sup> The Petition’s evidence must also address every limitation of every challenged claim.

**1. The Petitioner Failed To Set Forth A Proper Obviousness Analysis**

The Petitioner neglected to follow the legal framework for an obviousness analysis set forth long ago by the Supreme Court.<sup>85</sup> The Board

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<sup>84</sup> *OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 706 (Fed. Cir. 2012).

<sup>85</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 399 (2007) (“While the sequence of these questions might be reordered in any particular case, the [Graham] factors define the controlling inquiry.”)

has previously warned that failure to identify differences between the cited art and the claims is a basis for denying a petition:

A petitioner who does not state the differences between a challenged claim and the prior art, and relies instead on the Patent Owner and the Board to determine those differences based on the rest of the submission in the petition risks having the corresponding ground of obviousness not included for trial for failing to adequately state a claim for relief.<sup>86</sup>

The Petitioner ignored the Board's warning by failing to identify the differences between the challenged claim and the prior art. That is, the Petitioner failed to identify the claim limitations that it believed are missing from the primary reference (*i.e.*, Kantronics) and that it believed are instead taught by the secondary reference (*i.e.*, Kahn and APA).<sup>87</sup> Rather, the Petitioner listed a claim limitation and provided a partial description of one or more of the references, leaving the Board to figure out which reference the Petitioner is principally relying upon to teach the claim limitation and why the Petitioner relied upon a particular secondary reference.<sup>88</sup>

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<sup>86</sup> *Liberty Mutual v. Progressive Casualty*, CMB-2012-00003, paper 7 at 2 – 3.

<sup>87</sup> *See e.g.*, Petition, pp. 36-38.

<sup>88</sup> *See e.g., id.*

This technique obscures the arguments, forcing the Patent Owner to “conjure up arguments against its own patent.”<sup>89</sup> The Board has previously warned petitioners against this practice:

We address only the basis, rationale, and reasoning put forth by the petitioner and resolve all vagueness and ambiguity in Petitioner’s arguments against the Petitioner. ... It would be unfair to expect the Patent owner to conjure up arguments against its own patent, and just as inappropriate for the Board to take the side of the Petitioner to salvage an inadequately expressed ground ...<sup>90</sup>

On this basis alone, *inter partes* review based on obviousness should be denied.

**2. The Combination of References Would Not Have Taught Or Suggested An “actuated transceiver [that] comprises: one of the plurality of transceivers; a sensor ... and an actuator” As Recited In Claim 10.**

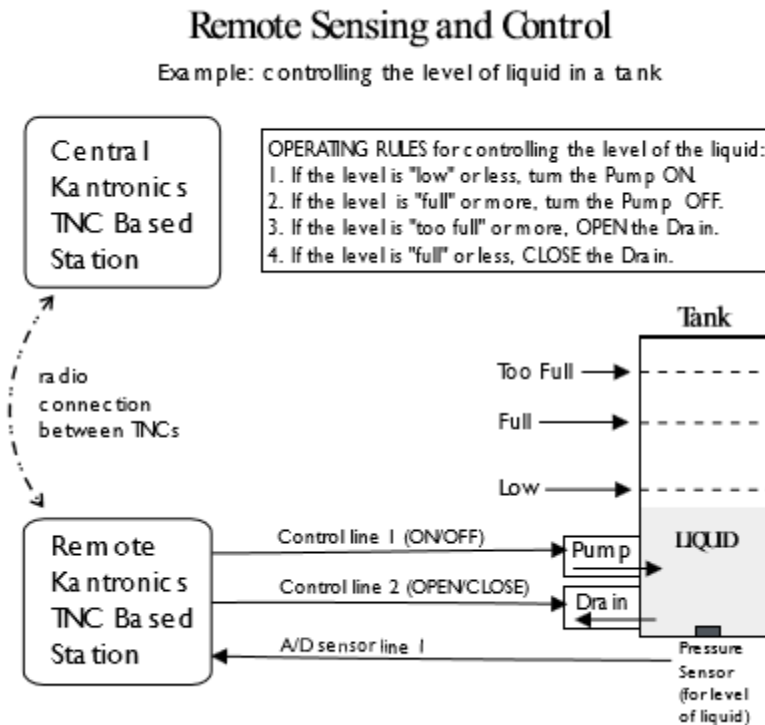
The Petitioner argued with respect to the diagram on page 167 of Kantronics that “[t]he radio station associated with the tank of fluid in the ‘Remote Sensing and Control’ example comprises an ‘actuated transceiver’

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<sup>89</sup> *Liberty Mutual v. Progressive Casualty*, CMB-2012-00003, paper 8 at 14 - 15.

<sup>90</sup> *Id.*

with two 'actuators' (a pump and a drain)."<sup>91</sup> But the diagram on page 167 of Kantronics (reproduced below) does not show a transceiver, a sensor and an actuator on the same device:



Indeed, the figure above shows that the sensor and actuator are on the Tank while the transceiver is in the TNC. Kantronics does not teach one device containing all three components, as required by claim 10.

For this additional reason, the combination of Kahn, Kantronics and the APA would not have taught an actuated transceiver comprising a transceiver, a sensor, and an actuator, as required by claim 10.

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<sup>91</sup> Petition, p. 50 (citations omitted).



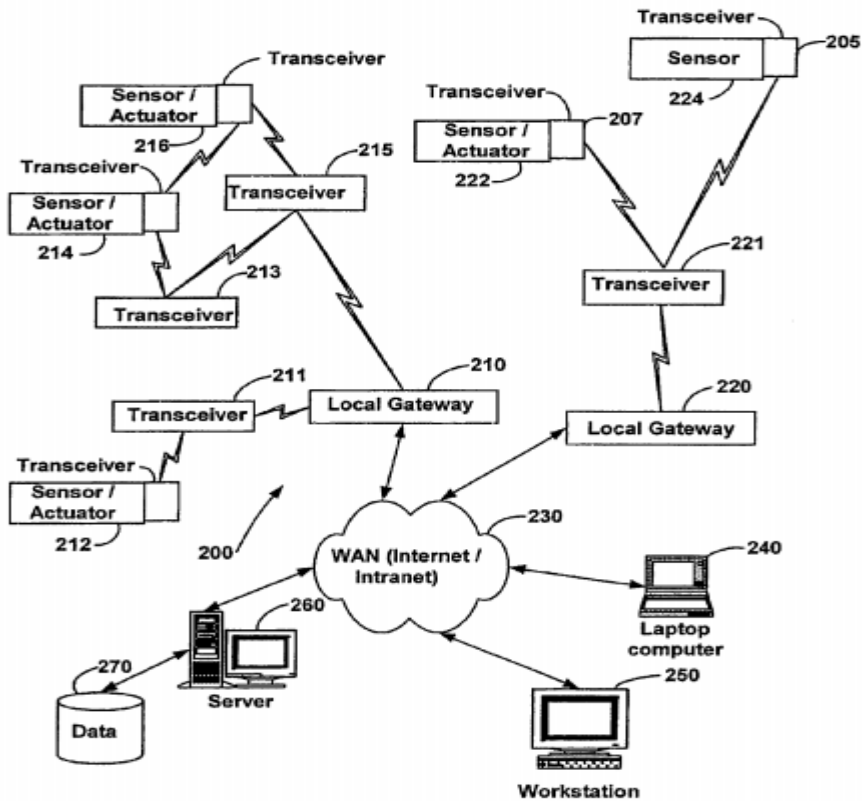
**3. The Petitioner Failed To Show That It Would Have Been Obvious To Modify Kahn With Kantronics And The APA To Achieve The Particular Structure Of A Controller Connected To An Actuated Transceiver Comprising A Transceiver, A Sensor and An Actuator As Required By Claims 1 and 10 Of The '893 Patent.**

The Petition's motivation to combine is rooted in forbidden hindsight analysis that is based on its incorrect assumption regarding the level of ordinary skill in the art. To support its obviousness ground based on the combination of Kahn, Kantronics, and the APA, the Petitioner asserted that "[o]ne of ordinary skill in the art would have been prompted to combine the wireless system disclosed by Kahn with the actuated transceiver of Kantronics to result in the claimed system because it is desirable to 'use remote sensors and controllers to monitor and automatically respond to system parameters to reach desired results,' as taught by APA."<sup>92</sup>

But the Petitioner failed to provide any evidence whatsoever that combining the various portions of the references would achieve the particular structure of a controller connected to an actuated transceiver comprising a transceiver, a sensor and an actuator as required by claims 1 and 10 of the '893 patent. The structure disclosed and claimed in the '893 patent is illustrated by FIG. 2, which is reproduced below:

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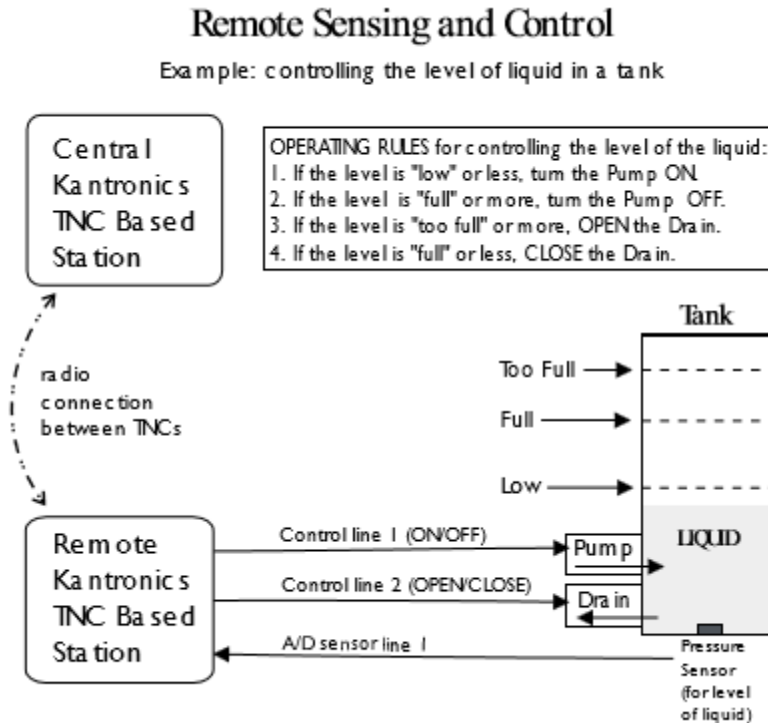
<sup>92</sup> Petition, pp. 36-37.



**FIG. 2**

As shown by FIG. 2 the controller (e.g., server 260, laptop computer 240, or workstation 250) is connected to the wireless transceivers (e.g., 216, 214, 212) comprising a transceiver, a sensor and an actuator.

The figure from Kantronics relied upon by the Petitioner has a very different structure, as shown by the copy of the figure below:



As illustrated by the figure above, a transceiver in a TNC is separate and distinct from any actuator or sensor in the Tank. That is, the figure from Kantronics does not show a controller connected to an actuated transceiver comprising a transceiver, a sensor and an actuator as disclosed and claimed in the '893 patent. Rather, the figure from Kantronics referenced by the Petitioner shows that the transceiver is in a different device than the actuator and sensor.

Thus, the prior art would have taught a very different structure than the structure that is disclosed and claimed in the '893 patent. The Petitioner did not present any objective evidence as to why one of ordinary skill in the art would have been able to achieve the structure of the '893 patent from the very

different structure taught by Kantronics by modifying it with either Kahn or the APA.

When the Board considered this very same type of unsupported argument for combining the teachings of different systems from different prior art references in *Epistar v. Boston University* (IPR2013-00298), it declined to institute the IPR.<sup>93</sup> There, the Board reasoned that “Petitioner does not show sufficiently that Manabe’s process conditions produce a similarly ‘polycrystalline’ GaN buffer layer, when gallium is selected over aluminum as a starting material.”<sup>94</sup> The Board further reasoned that “Petitioner identifies no objective evidence — for example, experimental data — tending to establish the structure of a GaN buffer layer grown under Manabe’s process conditions.”<sup>95</sup>

Here, as in *Epistar*, the Petitioner failed to provide experimental data or other objective evidence indicating that a “skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the

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<sup>93</sup> *Epistar, et al. v. Trustees Of Boston University*, IPR2013-00298, Decision Not To Institute, Paper No. 18 (P.T.A.B. November 15, 2103).

<sup>94</sup> *Id.*

<sup>95</sup> *Id.*

claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.”<sup>96</sup>

For this additional reason, the Board should not institute this IPR proceeding on the proposed obviousness ground.

**D. The Petition Fails to Identify Any Compelling Rationale for Adopting Redundant Grounds of Rejection With Kahn Or Kantronics As The Primary Reference.**

The Petitioner proposed three grounds for rejection: Ground I using Kahn for anticipation, Ground II using the combination of Kahn, Kantronics and the APA for obviousness, and Ground III using Kantronics for anticipation.<sup>97</sup> The Petitioner’s proposed grounds have two types of redundancies that have been prohibited by the Board: horizontal redundancy and vertical redundancy.<sup>98</sup> Horizontal redundancy “involves a plurality of

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<sup>96</sup> *OSRAM Sylvania, Inc. v. Am Induction Techs., Inc.*, 701 F.3d 698, 706 (Fed. Cir. 2012).

<sup>97</sup> Petition, pp. 19-60.

<sup>98</sup> *Liberty Mutual Insurance Company v. Progressive Casualty Insurance Company*, CBM-2012-00003, Paper No. 8 (P.T.A.B. October 25, 2012).

prior art references applied not in combination to complement each other but as distinct and separate alternatives.”<sup>99</sup> The Petition has horizontal redundancy because it includes grounds proposing the rejection of claims 1, 2, 10, and 37 as anticipated by two different references: i) Kahn, and ii) Kantronics.<sup>100</sup>

Vertical redundancy “involves a plurality of prior art applied both in partial combination and in full combination. In the former case, fewer references than the entire combination are sufficient to render a claim obvious, and in the latter case the entire combination is relied on to render the same claim obvious.”<sup>101</sup> The Petition has vertical redundancy because it includes grounds proposing the rejection of claim 10 with i) a single reference (*i.e.*, Kahn or Kantronics) and ii) a full combination of references (*i.e.*, Kahn, Kantronics and the APA).<sup>102</sup>

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<sup>99</sup> *Id.* at 3.

<sup>100</sup> Petition, pp. 15-26 and 38-59.

<sup>101</sup> *Liberty Mutual Insurance Company*, p. 3.

<sup>102</sup> Petition, pp. 27-38.

The Board has made clear that in order to ensure “the just, speedy, and inexpensive resolution of every proceeding,” it will not institute *inter partes* review proceedings on cumulative grounds.<sup>103</sup> Indeed, the Board has instructed parties that it will not “authorize inter partes review on certain unpatentability challenges . . . [where] the challenges appear to rely on the same prior art facts as other challenges for which inter partes review had been authorized.”<sup>104</sup> “In other words, considering multiple rejections for the same unpatentability issue would unnecessarily consume the time and resources of all parties involved.”<sup>105</sup>

To avoid dismissal of a proposed ground of unpatentability, a petitioner must “provide a meaningful distinction between the different, redundant rejections.”<sup>106</sup> Where multiple references have been cited for the same facts, it is not enough for a petitioner to argue that the cited references are not

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<sup>103</sup> *Illumina, Inc. v. Trustees of Columbia Univ.*, IPR2012-00006, Paper 43

(P.T.A.B. May 10, 2013) (*citing* 37 C.F.R. § 42.1(b)).

<sup>104</sup> *Id.*

<sup>105</sup> *Id.*

<sup>106</sup> *Id.*

identical, or to “speculate[] that in certain publications an element may be more clearly set forth in one publication rather than another.”<sup>107</sup> Rather, a petitioner must provide an adequate explanation as to the differences between the references and “how this difference would impact the unpatentability challenge.”<sup>108</sup>

Here, the Petitioner did not set forth any such explanation or rationale. Indeed, the portions of Kahn cited by the Petitioner have essentially the same teachings as the corresponding portions that the Petitioner cited in Kantronics.<sup>109</sup>

The Petitioner failed to explain how Kahn differs from Kantronics or how any consideration of the ground that uses Kahn as the sole reference for claims 1, 2, 10, and 37 would impact these proceedings differently than a consideration of the ground that uses Kantronics as the sole reference.<sup>110</sup> The Petitioner also failed to explain how why the reliance on only Kahn or

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<sup>107</sup> *Id.*

<sup>108</sup> *Id.*

<sup>109</sup> Petition, pp. 15-26 and 38-59.

<sup>110</sup> *See e.g., id.*



Kantronics for claims 10 may be the stronger assertion as applied in certain instances and why the reliance on the combination of Kahn, Kantronics and the APA may be the stronger assertion in other instances.<sup>111</sup>

That is, nothing in the Petitioner's analysis of the claims suggests that the grounds using Kahn would (or even could) be more determinative of an outcome of these proceedings than the grounds using Kantronics or the combination of Kahn, Kantronics and the APA.<sup>112</sup> Instead, all the Petitioner has done is to propose redundant grounds of rejections (*i.e.*, one with Kahn as the sole reference and the other with Kantronics as the sole reference), and request institution of a patent trial on all proposed rejections.<sup>113</sup> As indicated above, the Board has consistently held that such a request will not suffice to preclude dismissal of proposed challenges on grounds of redundancy.

Accordingly, the Petitioner's proposed grounds of unpatentability using Kantronics or the combination of Kahn, Kantronics and the APA (*i.e.*, Grounds II - III) are redundant over the proposed grounds of unpatentability

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<sup>111</sup> *Id.* at 15-59.

<sup>112</sup> *Id.* at 19-60.

<sup>113</sup> *Id.*

using Kahn as the primary reference (*i.e.*, Ground I). For this additional reason alone, the Board should deny the proposed grounds that are redundant.

## VII. CONCLUSION

For all the reasons expressed herein, the Petitioner did not show that it is more likely than not that they will prevail on any of the proposed grounds of rejections. Accordingly, the Petition should be denied.

Date: October 30, 2015

Respectfully Submitted,

By: /Gregory Gonsalves/  
Dr. Gregory Gonsalves  
Reg. No. 43,639  
2216 Beacon Lane  
Falls Church, Virginia 22043  
(571) 419-7252  
gonsalves@gonsalveslawfirm.com

### **CERTIFICATE OF SERVICE**

Under 37 C.F.R. §§ 42.6(e), this is to certify that I caused an electronic copy of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE PURSUANT TO 37 C.F.R. § 42.107(A) to be served on the Petitioner's lead and backup counsel listed below by filing in the Patent Review Processing System:

**Lead Counsel**

Donald L. Jackson (Reg. No. 41,090)  
Davidson Berquist Jackson & Gowdey, LLP  
8300 Greensboro Dr., Suite 500  
McLean, Virginia 22102  
Telephone: 571-765-7700  
Fax: 571-765-7200

**Back-up counsel**

Walter D. Davis, Jr. (Reg. No. 45,137)  
James D. Berquist (Reg. No. 34,776)  
Davidson Berquist Jackson & Gowdey, LLP,  
8300 Greensboro Dr., Suite 500,  
McLean, Virginia 22102  
Telephone: 571-765-7700  
Fax: 571-765-7200

SIPCO-IPCO-IPR@davidsonberquist.com

Date: October 30, 2015

By: /Gregory Gonsalves  
Dr. Gregory Gonsalves  
Reg. No. 43,639  
2216 Beacon Lane  
Falls Church, Virginia 22043  
(571) 419-7252  
gonsalves@gonsalveslawfirm.com