

UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE PATENT TRIAL AND APPEAL BOARD

**SDI Technologies, Inc.,  
Petitioner**

**v.**

**Bose Corporation,  
Patent Owner**

Case Nos. IPR2014-00343 and IPR2014-00346  
U.S. Patent Nos. 8,401,682 and 8,364,295

**Petitioner's Demonstratives**

# The '682 and '295 Patents

# The Patents

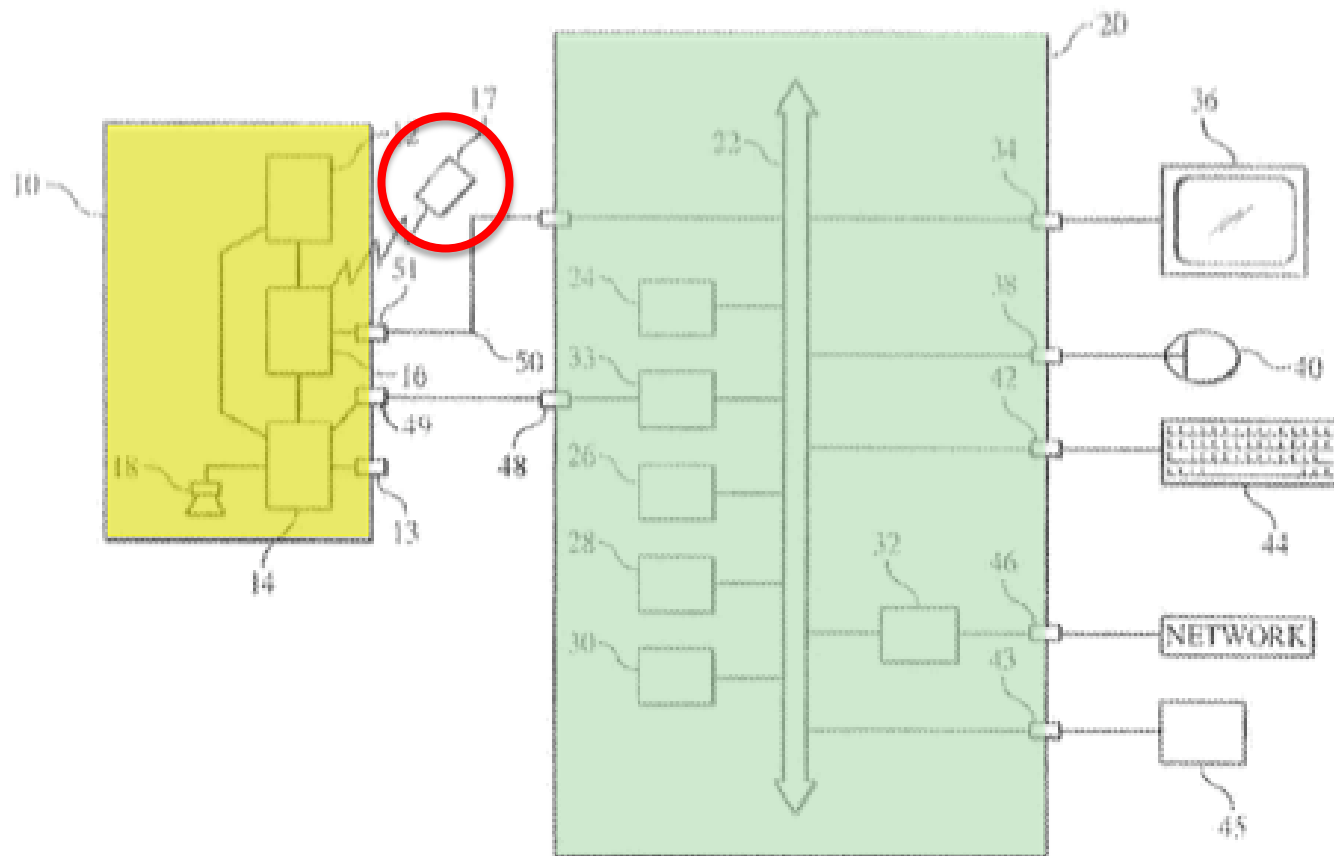
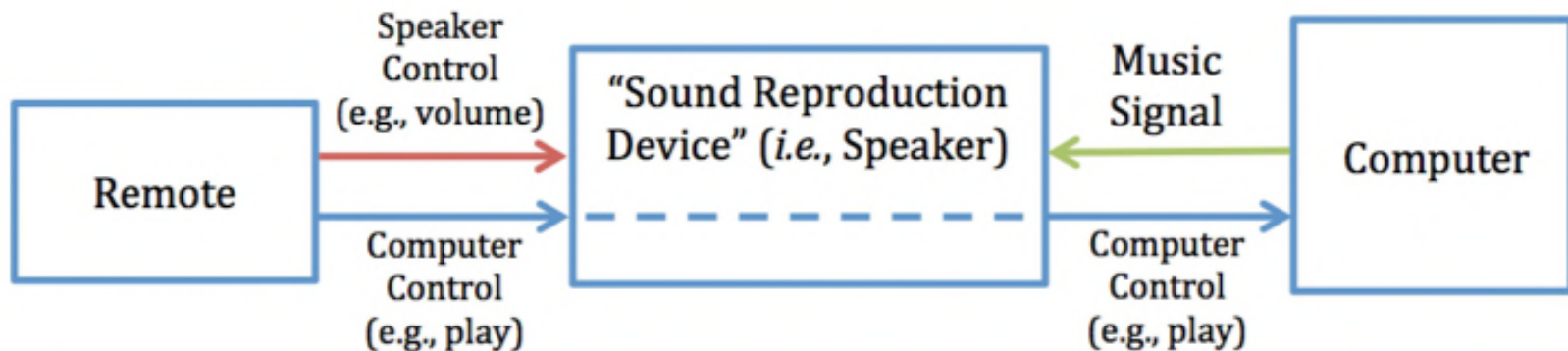


FIG. 1

SDI TECHNOLOGIES, INC., EXHIBIT 1019

# The Patents



SDI TECHNOLOGIES, INC., EXHIBIT 1019

# '295 Patent, Claim 1

1. An audio system configured to connect to a separate computer that is configured to provide audio information from any one of a plurality of sources, including digital music files stored on the computer and a network accessible by the computer, the audio system comprising:

(A) a sound reproduction device comprising: a housing; one or more speakers located at least partially within the housing;

an amplifier located within the housing for powering the one or more speakers; control circuitry located within the housing; and

a connector located at least partially within the housing that is configured to provide a physical and electrical connection exclusively between the sound reproduction device and the computer, wherein the connection includes one or more signal paths configured to (i) receive audio information from the computer corresponding to the digital music files stored on the computer and audio information from the network via the

computer, and (ii) transmit to the computer signals for controlling the computer; and

(B) a remote control device configured to transmit signals representing at least a first type of command from a user and a second type of command from a user to the sound reproduction device, wherein the first type of command is a command to control a user function of the sound reproduction device and the second type of command is a command to control a user function of the computer, wherein the control circuitry is configured to receive the signals from the remote control and, in response to receiving such signals:

(i) control the user function of the sound reproduction device when the user issues a command of the first type, and

(ii) transmit to the computer, via a signal path of the connector, a signal for controlling the user function of the computer when the user issues a command of the second type.

# '682 Patent, Claim 1

1. An audio system configured to connect to a separate computer that is configured to provide audio information from any one of a plurality of sources, including digital music files stored on the computer and a network accessible by the computer, the audio system comprising:

(a) a sound reproduction system comprising:  
a housing;

control circuitry located within the housing for receiving ~~control commands;~~

audio signal processing circuitry located within the housing for processing audio signals for reproduction;

one or more speakers for reproducing audio signals processed by the audio signal processing circuitry; and

a connector configured to provide a physical and electrical connection exclusively between the sound reproduction system and the computer, wherein the connection includes one or more signal paths configured to (i) receive audio information from the computer corresponding to the digital music files stored on the computer and audio information from the network via the computer, and (ii) transmit to the computer signals for controlling the computer; and

(b) a remote control device configured to transmit signals representing at least a first type of command from a user and a second type of command from a user to the control circuitry of the sound reproduction system, wherein the first type of command is a command to control a user function of the sound reproduction system and the second type of command is a command to control a user function of the computer,

wherein the control circuitry is configured to receive the signals from the remote control and, in response to receiving such signals:

(i) control the user function of the sound reproduction system when the user issues a command of the first type, and

(ii) transmit to the computer, via a signal path of the connector, a signal for controlling the user function of the computer when the user issues a command of the second type.

# Results of Earlier IPRs

# IPRs 2013-00350 & 00465

- **IPR2013-350** ('682 Patent): [T]he Board found claims 1-21, 24, 27, 28, 30- 48, 51, 54, 62, 63, 67-70, 73, 74 of the '682 patent unpatentable in view of the same prior art that forms the basis for this proceeding.
- **IPR2013-465** ('295 Patent): [T]he Board found claims 1-21, 24, 27, 29-47, 50, 63, 64, 68-70, 73, 74, 77, and 78 of the '295 patent unpatentable in view of the same prior art that forms the basis for this proceeding.
- These Petitions address claims that include just one additional feature.



# Claim Construction

# **“Configured To Respond To Signals Received From The Computer”**

- In the Institution Decision, the Board considered Bose’s argument, but found that the ordinary and customary meaning of “respond” also included “to show some reaction to a force or stimulus.”
- The Board determined that the portions of the specification cited by Bose did “not describe the structure of the claim language,” did not define or describe restrictively what it means to “respond,” and were simply examples that were not described as limiting.

# “Configured To Respond To Signals Received From The Computer”

## ❖ The ‘Claim Differentiation’ Argument Fails

- Bose argues that, because claims 25 and 51 provide that the speaker is “configured to respond,” the Board’s construction must be wrong because what is claimed in claims 1 and 25 is already configured to play music from the computer.
- [W]hile the independent claims recite a speaker and amplifier/signal processor, ***they do not require that the speakers play music from the computer.***

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# **“Configured To Respond To Signals Received From The Computer”**

(A) a sound reproduction device comprising: a housing; one or more speakers located at least partially within the housing;  
an amplifier located within the housing for powering the one or more speakers; control circuitry located within the housing; and

# **“Configured To Respond To Signals Received From The Computer”**

(a) a sound reproduction system comprising:  
a housing;  
control circuitry located within the housing for receiving control commands;  
audio signal processing circuitry located within the housing for processing audio signals for reproduction;  
one or more speakers for reproducing audio signals processed by the audio signal processing circuitry; and

# “Configured To Respond To Signals Received From The Computer”

## ❖ The Arguments Based on the Specification Fail

- Bose’s argument is that “respond” should be limited to its “answer or reply” construction because that is “consistent” with the specification.
- The Board’s construction is *also* “consistent with” the specification.
- Bose cannot show, and does not even try to show, that the Board’s construction—*which comes from Bose’s own dictionary definition of this common word*—is unreasonable.

# “Configured To Respond To Signals Received From The Computer”

## ❖ The Arguments Based on the Specification Fail

- [T]he first passage Bose cites is about the computer system responding to the speaker, while the claims concern *the opposite arrangement*, in which the speaker is responding to the computer.
- The second passage Bose cites relates to the automatic selection of preset radio stations, but the specification is silent about how the computer determines the strongest signals for available stations.

# “Configured To Respond To Signals Received From The Computer”

- **Bose’s ‘In Response To’ Argument Also Fails**
  - Bose argues that “the separate use of the terms ‘respond’ and ‘in response to’ in the claims (and in the claims of related patents, as well as the prosecution history) also supports Bose’s proposed construction.”
  - [I]t does not follow that because one thing means X another does not mean X.
  - [T]here is no reason why ‘respond’ and ‘in response to’ cannot have the same meaning.



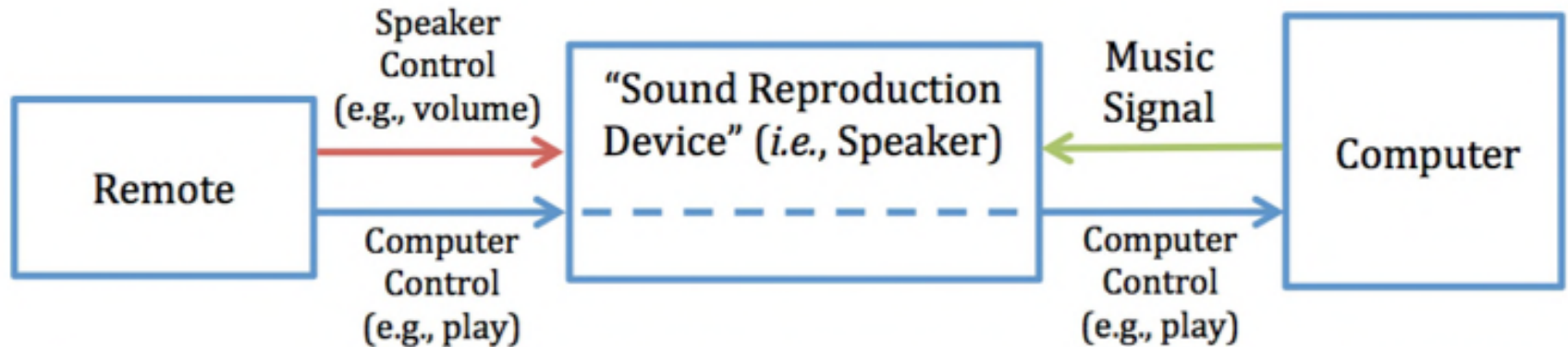
# **Ground I**

## **IRMan + Altec Lansing**

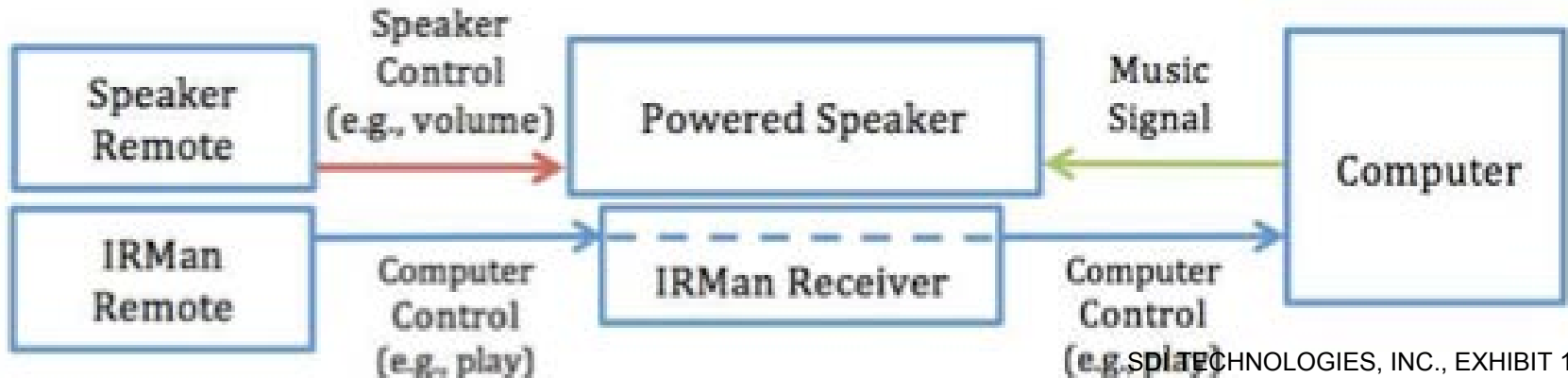
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# IRMan + Altec

## Bose Patents:



## IRMan + Altec:



SPK-1000, TECHNOLOGIES, INC., EXHIBIT 1019

# IRMan + Altec

Aside from the ‘respond’ claim construction argument, Bose offers only non-obviousness arguments that have already been considered and rejected in the [350/465] Final Written Decision.

# IRMan + Altec

## A POSITA Would Have Made this Combination

- Bose first argues that the instituted ground of rejection is defective because “a person of ordinary skill in the art would not have combined the references as proposed in the Amended Petition.”
- The Board has already considered this argument in the earlier IPRs, determining that “[t]he references do not teach away from Petitioner’s proposed combination.”

# IRMan + Altec

## A POSITA Would Have Made this Combination

- [T]he Board found that “the mere disclosure of alternative designs does not teach away.”
- The Board also found that Dr. Lippman’s testimony that “a skilled artisan would have made the proposed combination in order to reduce duplication and clutter, such that one remote would control both the speaker and the computer and using the IR receiver positioned in the speaker” had a rational underpinning.

# IRMan + Altec

## A POSITA Would Have Made this Combination

- The Board correctly concluded that “Patent Owner’s two combinations and Petitioner’s combination together constitute three rearrangements of the same elements, where each of those combinations is a predictable use of the elements for their intended purposes” and that “[p]recisely how to arrange these known elements would have been an obvious matter of design choice.”

# IRMan + Altec

## The Combination Does Teach All Claim Elements

### ❖ Configured to Respond

- Bose admits that the Altec Lansing Manual “discloses that the user is able to adjust the volume of the speakers, e.g., by having the computer transmit a command via USB to the speaker system, which then adjusts the amplifier settings.”
- Bose further admits that “[w]hen audio is received the speaker turns on automatically” due to “audio sensing circuitry in the speaker.”

SDI TECHNOLOGIES, INC., EXHIBIT 1019

# IRMan + Altec

## The Combination Does Teach All Claim Elements

### ❖ Configured to Respond

- “Bose does not argue that the combination does not meet this claim limitation under the Board’s construction.”
- “Bose’s argument on this limitation is based entirely on its claim construction, which is incorrect.”



# IRMan + Altec

## The Combination Does Teach All Claim Elements

### ❖ Location of the Amplifier/Signal Processing

- Bose argues that the amplifier/signal processor in the combination would not be in the same “housing” as the control circuitry.
- As the Board has already found “the control circuitry . . . is not limited to the IR receiver positioned on the satellite speaker, but rather includes circuitry in the subwoofer that receives commands from the remote control via the IR receiver . . . .”

SDI TECHNOLOGIES, INC., EXHIBIT 1019

# IRMan + Altec

## The Combination Does Teach All Claim Elements

### ❖ Location of the Amplifier

- The Board also agreed with SDI that “where to locate the particular circuitry would have been a predictable matter of design choice, with the circuitry performing the same intended function regardless of whether it is located in the subwoofer or a satellite speaker.”

# IRMan + Altec

## The Combination Does Teach All Claim Elements

### ❖ Connector Within the Housing

- Bose finally argues that the combination would not have a “connector located at least partially within” the same housing as the control circuitry.
- As the Board has already found “control circuitry is not limited to the IR receiver positioned on the satellite speaker, but rather includes circuitry in the subwoofer that receives commands from the remote control via the IR receiver.”

# Motion to Exclude

# **IPRs 2013-00350 & 00465**

The very same arguments made by Bose in the present Motion were already considered and rejected by this panel in two earlier proceedings in which other claims of the '682 patent and the '295 patent were found unpatentable.

# Authentication is a Low Bar

“[T]he burden to authenticate under Rule 901 is not high—only a prima facie showing is required,’ and a ‘district court’s role is to serve as gatekeeper in assessing whether the proponent has offered a satisfactory foundation from which the jury could reasonably find that the evidence is authentic.’”

*United States v. Hassan,*  
742 F.3d 104, 133 (4th Cir. 2014)

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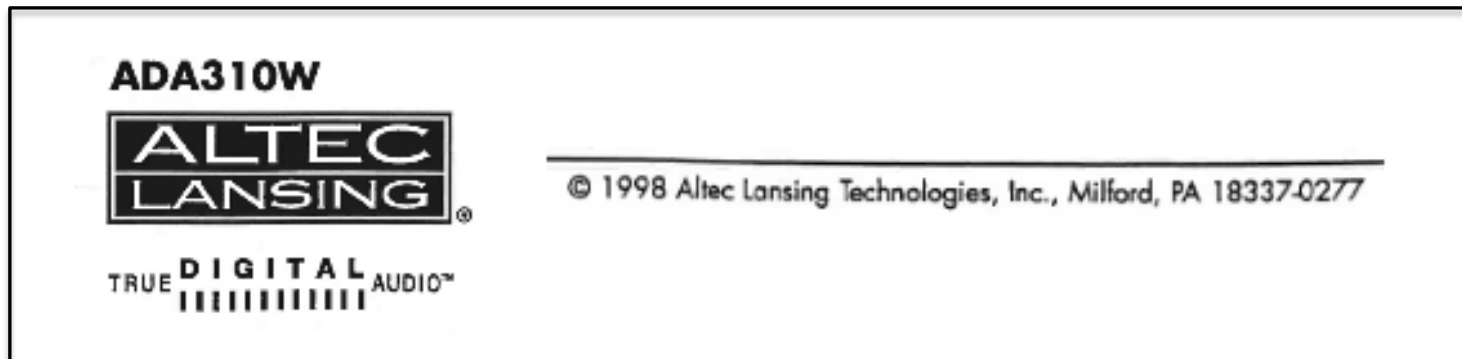
# Authentication is a Low Bar

“The burden of authentication does not require the proponent of the evidence to rule out all possibilities inconsistent with authenticity, or to prove beyond any doubt that the evidence is what it purports to be. Rather, the standard for authentication, and hence for admissibility, is one of ***reasonable likelihood***.”

*United States v. Holmquist*,  
36 F.3d 154, 168 (1st Cir. 1994)

# The Altec Lansing Manual

- Fed. R. Evid. 902(7) provides that a document with “[a]n inscription, sign, tag, or label purporting to have been affixed in the course of business and indicating origin, ownership, or control” is self-authenticating and “require[s] no extrinsic evidence of authenticity in order to be admitted.”
- Ex. 1011 bears the following logo and copyright notice:



- Exhibit 1011 is, therefore, self-authenticating.

SDI TECHNOLOGIES, INC., EXHIBIT 1019



# The Altec Lansing Manual

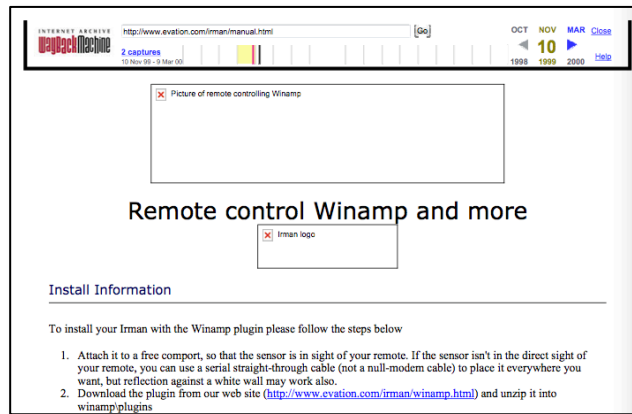
- Bose does not challenge the authenticity of the Altec Lansing Manual as a whole; it only contests the authenticity of page 7.
- At most, Bose might seek to exclude page 7. That narrow issue, however, is one that need not be reached, because the other pages of the manual, which Bose does not have any legitimate basis to exclude, are sufficient to show all of the features required to invalidate.

# The IRMan Web Pages

- Ex. 1010 bears the same distinctive characteristics as Exhibit 2002 in the 465 IPR, offered by Bose as a different page of the Internet Archive for the same underlying web site.



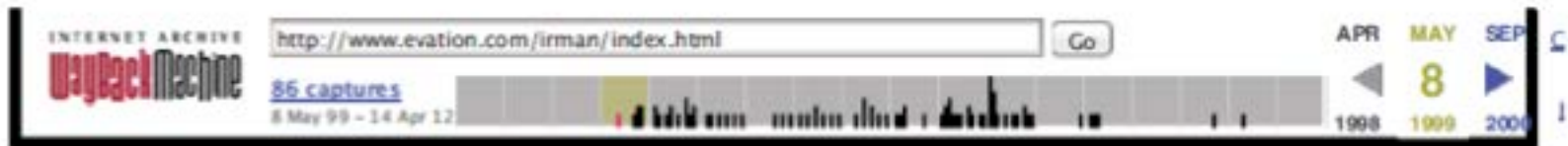
**Ex. 1010**



**IPR465, Ex. 2002**

# The IRMan Web Pages

- Rule 901(b)(4) provides for authentication by “Distinctive Characteristics and the Like” such as “[t]he appearance, contents, substance, internal patterns, or other distinctive characteristics of the item, taken together with all the circumstances.”



[web.archive.org/web/19990508121919/http://www.evation.com/irman/index.html](http://web.archive.org/web/19990508121919/http://www.evation.com/irman/index.html)

# The IRMan Web Pages

- Bose does not argue that Exhibit 1010 does not accurately represent archive pages of evation.com captured on May 8, 1999.
- In fact, as before, ***Bose challenges absolutely nothing about the exhibit itself.***
- Bose's failure to contest the authenticity of the document is particularly glaring given that the URL at the bottom of Exhibit 1010 is ***fully operational***, bringing any web browser to that particular evation.com record in the Internet Archive.

# The IRMan Web Pages

“[A]uthentication may be accomplished by the court taking judicial notice under Rule 201 of certain foundational facts needed to authenticate an electronic record.”

“Under this rule, the parties may request the court to take judicial notice of adjudicative facts that are either (1) generally known within the territorial jurisdiction of the trial court, or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.”

*Lorraine v. Markel Am. Ins. Co.,*  
241 F.R.D. 534, 553 (D. Md. 2007)

SDI TECHNOLOGIES, INC., EXHIBIT 1019

# The IRMan Web Pages

***“As a resource the accuracy of which cannot reasonably be questioned,*** the Internet Archive has been found to be an acceptable source for the taking of judicial notice.”

*Pond Guy v. Aquascape,*  
2014 U.S. Dist. LEXIS 85504 (E.D. Mich. June 24, 2014)

# The IRMan Web Pages

Taken *together*,

[1] the unique indicia of Exhibit 1010,

[2] Bose's own Exhibit 2002 bearing the same indicia,

[3] Bose's failure to raise any question about the document itself,

[4] Dr. Lippman's testimony,

[5] the fact that the URL can be used by anyone to verify the document now, and

[6] judicial notice of '*a resource the accuracy of which cannot reasonably be questioned*,'

are more than enough to establish a "reasonable likelihood" of authenticity of Exhibit 1010.

SDI TECHNOLOGIES, INC., EXHIBIT 1019

# The IRMan Web Pages

- A prior art document submitted as a “printed publication” under 35 U.S.C. § 102(a) is offered simply as evidence of what it described, not for proving the truth of the matters addressed in the document.”  
IPR2013-00086 (Paper 66, May 15, 2014), at 32.
- Because Ex. 1010 is offered for what says, not the truth of what it says, it is not hearsay.
- If Bose’s reply argument were correct, Internet Archive web pages, would ***always*** be inadmissible hearsay, as would, apparently, virtually all other documents.



# Lippman Testimony

- The Board has rejected this argument at least twice:
  - first reasoning that “just because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes;”
  - then explaining that “Patent Owner’s evidence suggests that a skilled artisan may have had reasons to pursue one or the other of its proposed combinations in certain circumstances, [however] the mere disclosure of alternative designs does not teach away.”
- There is no requirement that, in explaining how a combination of references renders patent claims obvious, an expert must discuss all other possible ways of combining the references.

SDI TECHNOLOGIES, INC., EXHIBIT 1019



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