

HAYNES BOONE

APPLE INC. V. ZIKLAG IP LLC

IPR2025-00700 (6,182,128)

Scott T. Jarratt, Adam C. Fowles, Kalyani Joshi Yamarthy
Counsel for Petitioner



DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Ex.1020 / IPR2025-00700 / Page 1 of 49
Apple Inc. and Amazon Web Services, Inc. v. Ziklag IP LLC

The '128 Patent

(12) **United States Patent**
Kelkar et al.

(10) **Patent No.:** **US 6,182,128 B1**
(45) **Date of Patent:** **Jan. 30, 2001**

(54) **REAL-TIME MUSIC DISTRIBUTION SYSTEMS**

(75) Inventors: **Anand Kelkar**, Calabasas; **Loren C. Johnson**, Los Angeles, both of CA (US)

(73) Assignee: **Touchmusic Entertainment LLC**, Los Angeles, CA (US)

(*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

(21) Appl. No.: **09/035,194**

(22) Filed: **Mar. 5, 1998**

(51) Int. Cl.⁷ **G06F 15/16; H04N 7/173; H04H 1/02**

(52) U.S. Cl. **709/219; 348/7; 348/12; 455/5.1**

(58) **Field of Search** **348/6, 7, 12, 13; 455/3.1, 4.2, 5.1, 6.1, 6.3; 709/217, 219; H04N 7/16, 7/173**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,956,768 9/1990 Sidi et al. 710/53
5,113,496 5/1992 McCalley et al. 710/126
5,191,410 3/1993 McCalley et al. 348/13
5,195,092 3/1993 Wilson et al. 348/13
5,418,713 5/1995 Allen 705/32
5,423,003 6/1995 Berreau 370/254
5,550,577 * 8/1996 Verbiest et al. 348/7
5,555,441 * 9/1996 Haddad 455/4.2

5,560,038 9/1996 Haddock 395/200.66
5,583,763 12/1996 Atcheson et al. 707/3
5,590,282 12/1996 Clynes 395/200.49
5,619,247 4/1997 Russo 348/3
5,636,276 6/1997 Brugger 380/4
5,729,281 * 3/1998 Utsumi et al. 348/12
5,756,280 * 5/1998 Soora et al. 455/4.2
5,781,889 * 7/1998 Martin et al. 705/1
5,790,423 * 7/1998 Lau et al. 364/514
5,867,155 * 2/1999 Williams 345/327
5,870,553 * 2/1999 Shaw et al. 395/200.49

* cited by examiner

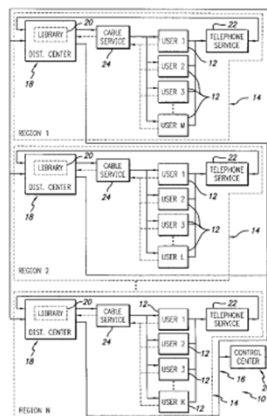
Primary Examiner—John W. Miller

(74) *Attorney, Agent, or Firm*—Oppenheimer Wolff & Donnelly LLP

(57) **ABSTRACT**

A music distribution system is divided into a plurality of regional networks each including a plurality of users. Each of the regional networks includes a distribution center to which the users of that region are connected. Each distribution center is provided with a library in which is stored a plurality of music titles. A user sends a request to the distribution center via an existing telephone network or cable network. Upon receiving the user's request, the distribution center locates and retrieves the requested data file stored in the regional library, and then transmits the requested file to the user via the existing cable service. At the user's destination, electronic equipment such as a television or a stereo receiver system may provide an audio/visual output of the requested data track.

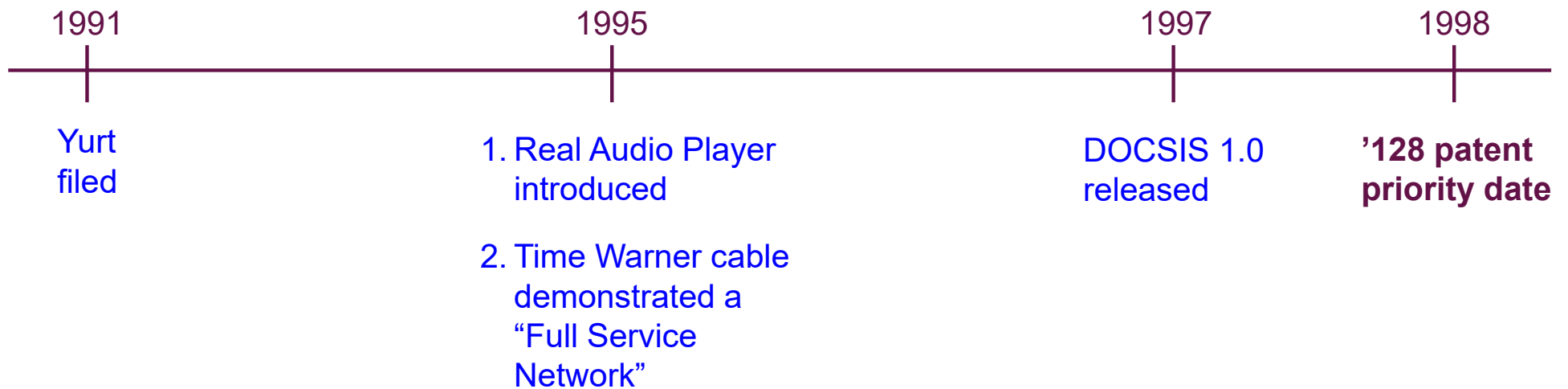
17 Claims, 3 Drawing Sheets



One Ground of Invalidity:

Yurt in view of Logan

On-Demand Media Delivery Was Already Well-known By 1998



Disputed Issues

1. Yurt renders obvious “*substantially real time*”
2. Yurt renders obvious “*central controller*”
3. A POSITA would have been motivated to combine Logan with Yurt
4. PO’s declarations should be given little to no weight
5. Motion to Strike PO’s new Sur-Reply theory about “*substantially real time*”

Disputed claim limitations – Claim 1

1. A system for distributing digital audio files in substantially real time to users connected to a plurality of satellite or cable TV networks, said system comprising:
 - a) a plurality of private distribution centers, each including:
 - 1) a network interface including an input and an output for connecting to one of the satellite or cable TV networks;
 - 2) a library including a plurality of digital audio files;
 - 3) a library interface including an input and an output connected to said library; and
 - 4) a processor connected to said network interface and said library interface, said processor for:
 - (a) displaying to a user a menu of said audio files;
 - (b) receiving requests from a user for a plurality of said digital audio files and a user address;
 - (c) retrieving said requested digital audio files from said library via said library interface;
 - (d) sequentially transmitting said requested digital audio files in substantially real time to said user through one of the satellite or cable TV networks via said output of said network interface; and
 - (e) recording the digital audio files requested by said user and said user address in a data base; and
 - b) a central controller connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

Disputed claim limitation – Claim 2

2. A system for distributing data files to users connected in a plurality of independent networks, said system comprising:

- a) a plurality of distribution centers, each including:
 - 1) a network interface including an input and an output for connecting to a single one of the networks;
 - 2) a library including a plurality of data files;
 - 3) a library interface including an input and an output connected to said library; and
 - 4) a processor connected to said network interface and said library interface, said processor for:
 - (a) receiving a request from a user via said input of said network interface, said request including information on one or more data files and a user address;
 - (b) determining which of said requested data files are available in said library (“available requested data files”), and which of said requested data files are unavailable in said library (“unavailable requested data files”) and for each of said available requested data files, retrieving said available requested data file from said library via said library interface; and for each of said unavailable requested data files, sending a file import request to a central controller requesting said unavailable requested data files and receiving said unavailable requested data files through said network interface;
 - (c) transmitting said requested data files to said single one of the networks via said output of said network interface; and
 - (d) recording request information indicative of said requested data file and said user address; and
- b) a **central controller** directly connected to said network interface of each of said distribution centers for:
 - 1) receiving file import requests from a requesting distribution center, said file import requests including information relating to requested data files;
 - 2) searching the library within at least one other of said distribution centers to locate at least one requested data file of said requested data files; and
 - 3) instructing said other distribution center to retrieve and transmit the requested data file that was located therein to said requesting distribution center.

- b) a **central controller** directly connected to said network interface of each of said distribution centers for:
 - 1) receiving file import requests from a requesting distribution center, said file import requests including information relating to requested data files;
 - 2) searching the library within at least one other of said distribution centers to locate at least one requested data file of said requested data files; and
 - 3) instructing said other distribution center to retrieve and transmit the requested data file that was located therein to said requesting distribution center.

Issue 1

Yurt renders obvious “*substantially real time*”

(claim 1 only)

'128 Patent Describes Two Options For Transmission/Playback

Option 1: Audio file transmitted in “real time,” without delay:

It is another object of the present invention to provide a distribution system which plays back music to subscribers in either **real time** or **at a predetermined time in the future** in high-fidelity bandwidth.

'128 Patent, 2:26-30.

Option 2: Audio file downloaded for future playback:

As discussed above, the distribution center **18** sends the requested files to the user system **12**. The decoder and control unit **60** receives and decodes the requested files, and then provides the decoded files to, for example, the stereo receiver **72** **for an immediate audio playback** on the speakers **74**. Alternatively, the decoded files may be provided to the recorder **76** for recording **for playback in the future**. The

'128 Patent, 6:24-29.

translation of the original selection. If the user wants to listen to the selection in its original high-fidelity form, then the user needs to download the selection; after the downloading is complete, the user may listen to the selection by playing it back through a home stereo system. A number of

Petitioner's Authorized Brief, 1-2.

'128 Patent, 1:45-49.



Construction of “*substantially real time*”

1. A system for distributing digital audio files in substantially real time to users connected to a plurality of satellite or cable TV networks, said system comprising:

a) a plurality of private distribution centers, each including:

1) a network interface including an input and an output for connecting to one of the satellite or cable TV networks;

2) a library including a plurality of digital audio files;

3) a library interface including an input and an output connected to said library; and

4) a processor connected to said network interface and said library interface, said processor for:

(a) displaying to a user a menu of said audio files;

(b) receiving requests from a user for a plurality of said digital audio files and a user address;

(c) retrieving said requested digital audio files from said library via said library interface;

(d) sequentially transmitting said requested digital audio files in substantially real time to said user through one of the satellite or cable TV networks via said output of said network interface; and

(e) recording the digital audio files requested by said user and said user address in a data base; and

b) a central controller connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

Yurt Teaches “*substantially real time*” Under the Plain Meaning

A still further object of the present invention is to provide a picture and sound transmission system wherein the selected audio/video material is sent over any one of several existing communication channels in a fraction of real time to any location chosen by the user that has a specified receiver.

Ex.1005, 1:66-2:4; Petition, 26-27, 43-44.

rial as it is distributed by transmission system 100. Alternatively, the reception systems 200 of the present invention may perform a combination of buffering and non-buffering by buffering some of the requested material and decompressing the remainder of the requested material for immediate viewing as it is distributed by transmission system 100.

Ex.1005, 5:3-9; Petition, 26-27, 43-44.

Summary: Yurt Teaches “Real Time” Transmission Using the Same Language

'128 Patent	Yurt
Transmission in “real time”	Transmission in “a fraction of real time”
“for an immediate audio playback”	“for immediate viewing”

'128 Patent, 2:26-30, 6:24-27.

Ex.1005, 1:66-2:4, 5:3-9.

Petition, 26-27, 43-44; Response, 15-17; Petitioner’s Brief, 2.



PO's shifting position regarding "*substantially real time*"

POPR	No construction of " <i>substantially real time</i> " proposed or requested.
PO's Response	Though requested, no construction of " <i>substantially real time</i> " proposed. Only one requirement: "Substantially real-time requires playback while transmission is ongoing."
PO's Sur-Reply	No construction of " <i>substantially real time</i> " proposed, but new requirements: "The 'substantially real time' claim limitation requires a coordinated operational model, and is <i>not</i> satisfied by merely timing playback." "Substantially real time' refers to a system that, in response to a user request, determines where content resides in storage and routes the content across distribution centers while playback is occurring [sic]."

See generally Prelim. Resp.; Response, 23, 30; Sur-Reply, 5, 8-9.

Reply, 8-9; Motion to Strike, 3-4, Petitioner's Brief, 1.

Construction of “*substantially real time*”

Patent Owner requests construction, but fails to provide one:

Petitioner's expert (Dr. Lippman) takes the position that no claim terms require express construction. EX1003 ¶ 48. Patent Owner does not agree. At a minimum, “substantially real time” requires clarification to ensure that Petitioner does not erroneously equate bulk “fraction of real time” delivery with streaming-like sequential playback. Additionally, “central controller ... for routing ... between distribution

Response, 23; see also Reply, 8-9.

Construction of “*substantially real time*”

Patent Owner Response:

time”. This argument is incorrect. Substantially real-time requires playback while transmission is ongoing. In contrast, Yurt teaches bulk delivery for later playback.

Response, 30.

Construction of “*substantially real time*”

PO: “Substantially real-time requires playback while transmission is ongoing.”

Response, 30.

Mr. Johnson (named inventor):

The way we overcame that objection was, basically -- and the whole purpose of the invention was to find a way to deliver media while that allowed playback while the file was still arriving.

So that's how I would describe the substantially realtime; playback while the file is still arriving.

Ex.1018, 47:18-48:22; Reply, 10-11.

Dr. McCulloh:

A Yeah, that's -- that would be my definition for a streaming service. I would call it realtime if I had no delay or disruption in playing the content.

Ex.1017, 114:13-21; Reply, 11.

that's not realtime. So I think what we're talking about is I would agree that if you can download it and there's no disruption in the content, the music, the song, the show, whatever, I would call that realtime from a consumer's perspective.

Ex.1017, 115:2-8; Reply, 11.

Yurt Teaches “*substantially real time*” Under PO’s Theory

Patent Owner: “Substantially real-time requires playback while transmission is ongoing.”

Response, 30.

Mr. Johnson: “[T]he whole purpose of the invention was to find a way to deliver media while that allowed playback while the file was still arriving.”

Ex.1018, 48:15-19.

Yurt:

rial as it is distributed by transmission system 100. Alternatively, the reception systems 200 of the present invention may perform a combination of buffering and non-buffering by buffering some of the requested material and decompressing the remainder of the requested material for immediate viewing as it is distributed by transmission system 100.

Ex.1005, 5:3-9; Reply, 17-19.

Issue 2

Yurt renders obvious “*central controller*”

(claims 1 and 2)

Construction of “*central controller*”

1. A system for distributing digital audio files in substantially real time to users connected to a plurality of satellite or cable TV networks, said system comprising:

a) a plurality of private distribution centers, each including:

1) a network interface including an input and an output for connecting to one of the satellite or cable TV networks;

2) a library including a plurality of digital audio files;

3) a library interface including an input and an output connected to said library; and

4) a processor connected to said network interface and said library interface, said processor for:

(a) displaying to a user a menu of said audio files;

(b) receiving requests from a user for a plurality of said digital audio files and a user address;

(c) retrieving said requested digital audio files from said library via said library interface;

(d) sequentially transmitting said requested digital audio files in substantially real time to said user through one of the satellite or cable TV networks via said output of said network interface; and

(e) recording the digital audio files requested by said user and said user address in a data base; and

b) a central controller connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

Construction of “central controller”

2. A system for distributing data files to users connected in a plurality of independent networks, said system comprising:

- a) a plurality of distribution centers, each including:
 - 1) a network interface including an input and an output for connecting to a single one of the networks;
 - 2) a library including a plurality of data files;
 - 3) a library interface including an input and an output connected to said library; and
 - 4) a processor connected to said network interface and said library interface, said processor for:
 - (a) receiving a request from a user via said input of said network interface, said request including information on one or more data files and a user address;
 - (b) determining which of said requested data files are available in said library (“available requested data files”), and which of said requested data files are unavailable in said library (“unavailable requested data files”) and for each of said available requested data files, retrieving said available requested data file from said library via said library interface; and for each of said unavailable requested data files, sending a file import request to a central controller requesting said unavailable requested data files and receiving said unavailable requested data files through said network interface;
 - (c) transmitting said requested data files to said single one of the networks via said output of said network interface; and
 - (d) recording request information indicative of said requested data file and said user address; and
- b) a central controller directly connected to said network interface of each of said distribution centers for:
 - 1) receiving file import requests from a requesting distribution center, said file import requests including information relating to requested data files;
 - 2) searching the library within at least one other of said distribution centers to locate at least one requested data file of said requested data files; and
 - 3) instructing said other distribution center to retrieve and transmit the requested data file that was located therein to said requesting distribution center.

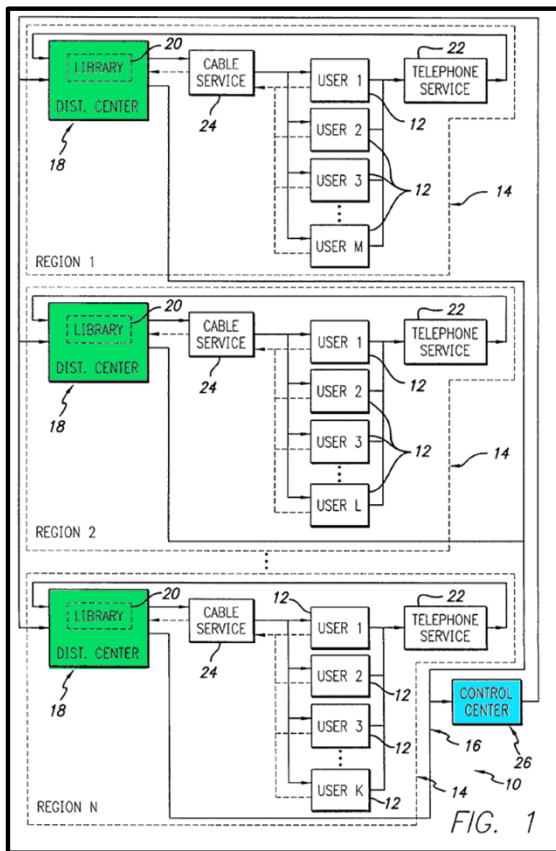
- b) a central controller directly connected to said network interface of each of said distribution centers for:
 - 1) receiving file import requests from a requesting distribution center, said file import requests including information relating to requested data files;
 - 2) searching the library within at least one other of said distribution centers to locate at least one requested data file of said requested data files; and
 - 3) instructing said other distribution center to retrieve and transmit the requested data file that was located therein to said requesting distribution center.

Yurt Teaches Claim 1's "central controller" Under the Plain Meaning

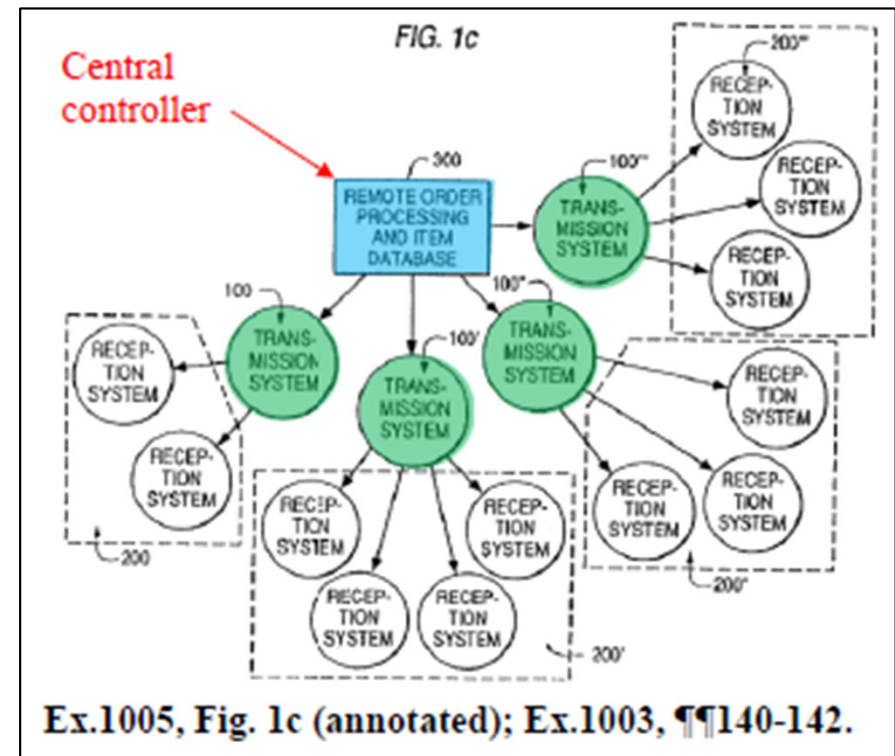
'128 Patent, Claim 1:

b) a **central controller** connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

'128 patent:



Yurt:



Reply, 19-23; Petition, 10, 48-52.

Yurt Teaches Claim 1's "*central controller*" Under the Plain Meaning

'128 Patent, Claim 1:

b) a central controller connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

Yurt teaches routing digital files between distribution centers:

To complete an order, the remote order processing and item database 300 preferably connects to the compressed data library 118 of choice via the library access interface 121 and communicates with the library system control computer 1123. Preferably the user's account ID, identification of the item for transmission and the chosen destination for the item are communicated. Through employment of distributed order processing systems of this type many orders may be processed with minimal library overhead.

Ex.1005, 15:23-30; Reply, 24.

Yurt Teaches Claim 2's "*central controller*" Under the Plain Meaning

'128 Patent, Claim 2:

- b) a **central controller** directly connected to said network interface of each of said distribution centers for:
- 1) receiving file import requests from a requesting distribution center, said file import requests including information relating to requested data files;
 - 2) searching the library within at least one other of said distribution centers to locate at least one requested data file of said requested data files; and
 - 3) instructing said other distribution center to retrieve and transmit the requested data file that was located therein to said requesting distribution center.

Yurt:

The system may also preferably include **dispatching control software** which receives input from the remote order processing and item database 300 and sends distribution requests to the distribution systems. In instances where not all items are contained in each of the compressed data libraries 118, the dispatching software will keep a list of the available titles in a particular compressed data library 118. The dispatch software may also preferably coordinate network traffic, source material library 111 utilization, source material library 111 contents, and connection costs. By proper factoring of

Ex. 1005, 17:57-64; Reply, 19-23; Petition, 48-52.

Construction of “*central controller*”

Patent Owner requests a construction, but again fails to provide one:

playback. Additionally, “central controller ... for routing ... between distribution centers” (and claim 2’s search/instruction functions) require clarification to avoid
Petitioner’s relabeling passive indexing/dispatching as the claimed orchestrator, which
creates confusion. Such proper and appropriate claim construction is needed because

Response, 23; see also Reply, 8-9.

Construction of “*central controller*”

Patent Owner improperly imports **multiple** unclaimed requirements into the claims:

- “active” (versus “passive”)
- “orchestration”
- “per-request”
- “control plane”

None of these concepts are found anywhere in the '128 patent.

Response, 3, 4, 8, 24, 27.

Reply, 12-13, 23.

Construction of “*central controller*”

Patent Owner’s application of these erroneous concepts adds confusion instead of clarity:

PO (citing Dr. McCulloh’s Declaration):	Dr. McCulloh’s Deposition:
“The '128 patent reflects an architectural commitment to active, distributed orchestration, not passive distribution ... <u>Passive approaches, such as indexing content, staging it in advance</u>, or replicating it based on popularity, can operate without a real-time control plane.” (citing EX2009, McCulloh Decl. ¶31) Response, 24-25.	Q: Sounds like you're saying that active orchestration doesn't require the content being orchestrated to be requested first; is that right? A: No. I think active could even be <u>positioning it</u> so that it is closer to the user that's requesting it, right. So it's <u>doing something active, something in advance</u> to make this faster... Ex.1017, 137:13-22, 139:12-18; Reply, 13-14.

Construction of “*central controller*”

Mr. Johnson’s testimony does not resolve the confusion:

Ex.2007, ¶34. In deposition, Mr. Johnson added yet another concept to explain “control plane” – that “it’s a center of the brain”; but this further concept is, again, nowhere in the ’128 patent. Ex.1018, 50:9-51:9. Beyond that, Mr. Johnson believes “control plane” was a term “used partly by our attorney.” Ex.1018, 88:5-12.

Reply, 14.

Yurt Teaches “*central controller*” Under PO’s Theory

“The '128 patent reflects an architectural commitment to active, distributed orchestration, not passive distribution...Those are materially different designs. Passive approaches, such as indexing content, staging it in advance, or replicating it based on popularity, can operate without a real-time control plane. True multi-region orchestration, by contrast, must reliably execute per-request decisions across independent regions...”

Response, 24.

Yurt teaches “per-request” “active,” “orchestrat[ed]” distribution:

The system may also preferably include dispatching control software which receives input from the remote order processing and item database 300 and sends distribution requests to the distribution systems. In instances where not all items are contained in each of the compressed data libraries 118, the dispatching software will keep a list of the available titles in a particular compressed data library 118. The dispatch software may also preferably coordinate network traffic, source material library 111 utilization, source material library 111 contents, and connection costs. By proper factoring of these variables, efficient use of the available distribution channels may be achieved.

Ex. 1005, 17:54-66; Reply, 23-28; Petition, 48-52, 54-59.

Yurt teaches “*central controller*” Under PO’s Theory

Yurt teaches “control plane” behavior as described by PO’s declarants:

PO’s Declarants:	Yurt:
Dr. McCulloh: “So the <u>control plane</u>, I’m talking about the central controller that kind of, you know, <u>makes kind of intelligent decisions</u> as far as <u>where it is going to store content</u> to improve the latency.” Ex.1017, 151:6-11.	“The system may also preferably include <u>dispatching control software</u> ... [which] may also preferably <u>coordinate</u> network traffic, <u>source material library 111 utilization</u>, <u>source material library 111 contents</u>, and connection costs. By proper factoring of these variables, <u>efficient use of the available distribution channels</u> may be achieved.” Ex. 1005, 17:54-66; Reply, 23-28; Petition, 48-52, 54-59.
Mr. Johnson: “...the <u>central controller</u> which has a <u>purview of the entire larger network</u> in many independent regions ... That’s the function of the central controller. It <u>actively manages the distribution system</u>.” Ex.1018, 52:2-11; Reply, 26.	“Accordingly, Yurt teaches that the <u>distribution control software</u> and the <u>remote order processing and item database 300</u> each exist at a <u>network level above</u> the libraries, transmission systems, and reception systems.” Ex.1003, ¶142, 140-143; Reply, 23-28; Petition, 48-52, 54-59.

Issue 3

A POSITA would have been motivated to combine Logan
with Yurt

The Combination is Straightforward

3. Reasons to Combine Yurt with Logan

A POSITA would have been motivated to combine Yurt with Logan for several reasons, discussed further below. Combining Logan's usage log teachings with Yurt's improved audio file accessibility (e.g., via popularity) to track additional user request information would have been obvious, beneficial, and predictable. Ex.1003, ¶¶62-72.

Petition, 19.

Patent Owner Misinterprets the Combination

Patent Owner:

- Argues that Logan does not teach **all** of the allegedly required architecture of the claimed system

Response, 30-32;
Sur-Reply, 18-19.

Petitioner:

- In the combination, Logan is only used for teaching usage logging
- Logan provides implementation details for logging that Yurt teaches is desirable
- The combination was trivial and predictable in view of the compatibility between system teachings

Petition, 19-23;
Reply, 28-30.

Issue 4

PO's declarations should be given little to no weight

Topics Covered By Patent Owner's Declarants

Mr. Johnson (named inventor)	Dr. McCulloh
• The '128 Patent • POSITA Definition • Disagreement with Dr. Lippman's Background Discussion • Claim Construction • Yurt and Logan Ex.2007.	• The '128 Patent • Disagreement with Dr. Lippman's Background Discussion Ex.2009.

Patent Owner's Declarations

Mr. Johnson:

- Direct financial bias as a named co-inventor and sole beneficial owner of the '128 Patent:

Q I see. And if a settlement happened or a court award, like you mentioned, would you personally stand to benefit financially from that?

A Yeah, I imagine I would.

Ex.1018, 92:22-93:8, 96:2-6; Ex.2007, ¶8; Reply, 5-8.

Patent Owner's Declarations

Mr. Johnson:

- Does not satisfy PO's POSITA definition
 - No experience in designing cable/satellite delivery systems or in distributed media systems
 - Deferred all technical implementation to co-inventor (Mr. Kelkar)
 - “[Y]ou’d have to ask him about all of that. I just know that...he is very bright and had a lot of experience...enough to understand how this could work”
- Does not satisfy Petitioner's POSITA definition
 - “I’m not an engineer or an expert in [cable/satellite delivery architectures] at all”

Ex.1018, 135:12-136:2, 130:19-131:11; Ex.2007, ¶18; Reply, 5-8.

Motion to Strike

PO's new theory about "*substantially real time*" in Sur-Reply

PO's Sur-Reply Adds Improper New Requirements

POR	PO Sur-Reply
“Substantially real-time requires playback while transmission is ongoing.” Response, 30.	“The ‘substantially real time’ claim limitation requires a coordinated operational model, and is not satisfied by merely timing playback.” “‘Substantially real time’ refers to a system that, in response to a user request, determines where content resides in storage and routes the content across distribution centers while playback is occurring.” Sur-Reply, 5, 9.

PO's New Requirements Contradict Inventor's Testimony

Mr. Johnson:

The way we overcame that objection was, basically -- and the whole purpose of the invention was to find a way to deliver media while that allowed playback while the file was still arriving.

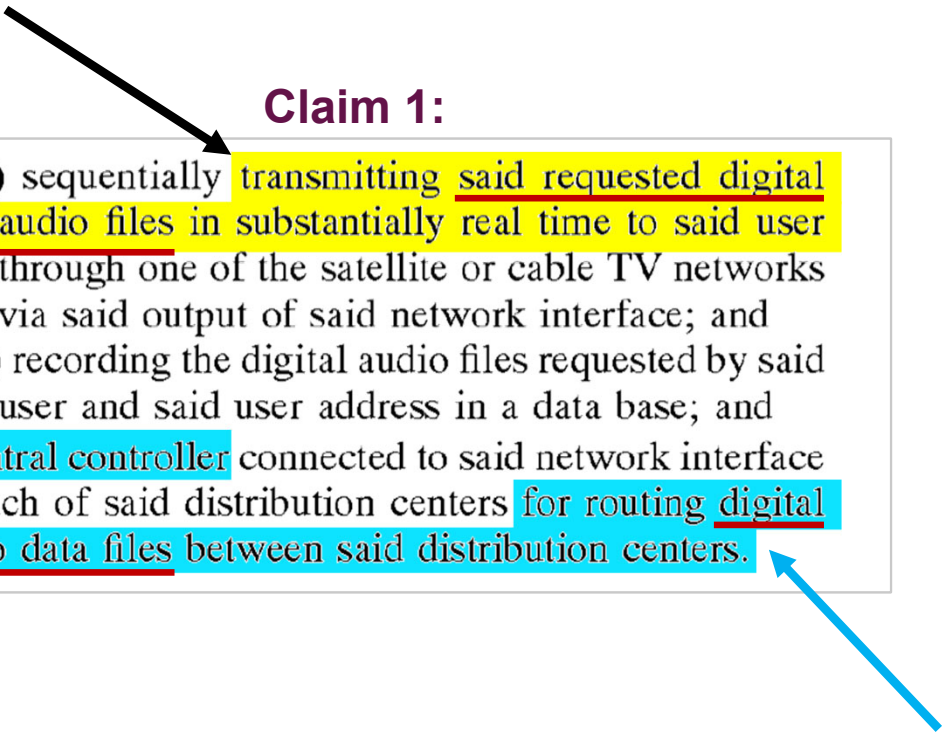
So that's how I would describe the substantially realtime; playback while the file is still arriving.

Ex.1018, 47:18-48:22; Motion to Strike, 3-4.

PO's New Requirements are Inconsistent with the Claims

Distribution center's transmitting
“*said requested digital audio files*”

Claim 1:

- 
- (d) sequentially transmitting said requested digital audio files in substantially real time to said user through one of the satellite or cable TV networks via said output of said network interface; and
 - (e) recording the digital audio files requested by said user and said user address in a data base; and
 - b) a central controller connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

Central controller's routing
generic “*digital audio data files*”

PO's New Requirements are Inconsistent with the Claims

PO: The '128 patent claims "require a system in which a user triggers coordinated operations—including locating content across distributed storage systems and routing that content for delivery—while playback occurs."

Claim 1:

- (d) sequentially transmitting said requested digital audio files in substantially real time to said user through one of the satellite or cable TV networks via said output of said network interface; and
- (e) recording the digital audio files requested by said user and said user address in a data base; and
- b) a central controller connected to said network interface of each of said distribution centers for routing digital audio data files between said distribution centers.

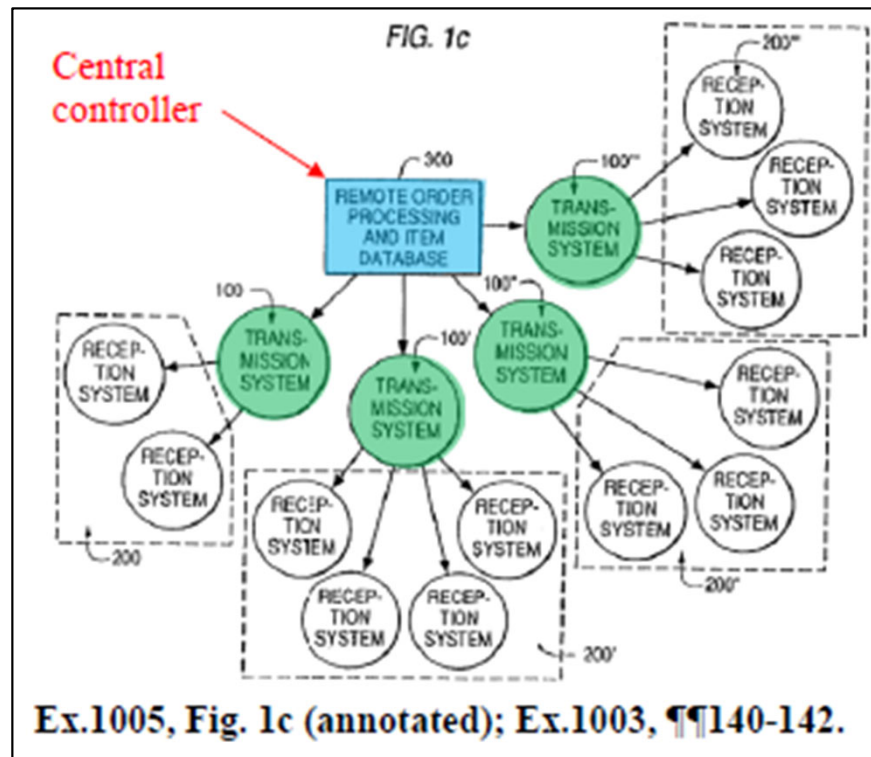
Claim 2:

- b) a central controller directly connected to said network interface of each of said distribution centers for:
 - 1) receiving file import requests from a requesting distribution center, said file import requests including information relating to requested data files;
 - 2) searching the library within at least one other of said distribution centers to locate at least one requested data file of said requested data files; and
 - 3) instructing said other distribution center to retrieve and transmit the requested data file that was located therein to said requesting distribution center.

Sur-Reply, 10.

Yurt Still Teaches “*substantially real time*”

Yurt:



Yurt's compressed inter-library transfers occur as part of the same real-time delivery to the user.

Ex.1005, 5:1-9; Petitioner's Brief, 4-5.

Appendix

Yurt Teaches “*substantially real time*” Under the Plain Meaning

Dr. Lippman
(Petitioner’s expert):

“... a POSITA would have understood ‘less than real time’/ ‘a fraction of real time’ to be even better than real-time, e.g., **faster than even real-time would require**. That, of course, also means that the system is able to transmit so that the **audio is consumed as it is received**. For example, in Yurt, distributing the information in less than real time results in the system at the receiving end being able to **‘decompress in real time the requested material as it is distributed** by transmission system 100.’ Ex.1005, 4:64-5:9.”

Ex.1003, ¶ 79; Petition, 27; Reply, 16.

Dr. Lippman:

“That is, Yurt uses the relatively high bandwidth of cable systems to similarly [to the ‘128 patent] consume audio content ‘at real time.’”

Ex.1003, ¶ 79; Petition, 27; Reply, 16.

Yurt Teaches “*substantially real time*” Under the Plain Meaning

Dr. Lippman:

of [1.0]. This is because a POSITA would have understood “less than real time”/“a fraction of real time” to be even better than real-time, e.g., faster than even real-time would require. That, of course, also means that the system is able to transmit so that

Ex.1003, ¶79; Petition, 26; Reply, 16-17.

Yurt delivers content so fast that some of it is buffered so immediate playback can catch up:

rial as it is distributed by transmission system 100. Alternatively, the reception systems 200 of the present invention may perform a combination of buffering and non-buffering by buffering some of the requested material and decompressing the remainder of the requested material for immediate viewing as it is distributed by transmission system 100.

Ex.1005, 5:4-9; Ex.1003, ¶¶79, 126; Petition, 27, 44.

Yurt Teaches “*substantially real time*” Under the Plain Meaning

Mr. Johnson agreed that buffering is included:

basically -- the correct term that we distinguish in the patent and before our examiner is "substantially realtime." And that just makes a little bit of room for buffering and other things. But

Ex.1018, 39:1-9; Reply, 16-17.

The Yurt-Logan Combination is Straightforward

Yurt already teaches tracking information in response to a user request:

Once assigned, the popularity code may be dynamically updated, by factoring item usage against system usage. Thus, stored items are dynamically moved to the most appropriate media over their life in the compressed data library 118. If a particular item stored in compressed data library 118 is retrieved frequently by users, storage in compressed data library 118 is preferably on higher speed, more reliable, and probably more expensive media. Such media includes Winchester and magneto-opti-

system control computer 1123. The request contains the address of the user, the address of the item, and optionally includes specific frame numbers, and a desired viewing time of the item.

Ex.1005, 12:21-46; Reply, 28-30; Petition, 19-23.

Logan teaches storing user/usage data in response to a request for audio data:

HTML interface 128. The host server 101 additionally stores and maintains a user data and usage log database indicated at 143 which stores uploaded usage data received from the store 109 in the player 103 via the Internet pathway 123 and the FTP server interface 125. The user data 143 further contains additional data describing the preferences, demographic characteristics and program selections unique to each subscriber which is developed largely from user-supplied data obtained when users submit HTML form data

Ex.1006, 5:33-42; Reply, 28-30; Petition, 19-23.

POSITA Definition

Patent Owner's higher proposed level of skill renders the claims even more obvious:

Petitioner:

A Person of Ordinary Skill in The Art ("POSITA") in March 1998 would have been someone knowledgeable and familiar with centralized and distributed database systems available in the late 1990s. A POSITA would have a bachelor's degree in electrical engineering, computer science, computer engineering, or equivalent training, and approximately two years of experience working in the field of networked systems for distributing data files from one or more databases.

Petition, 12; Reply, 5-6.

Patent
Owner:

A more appropriate definition of a POSITA relevant to the subject matter of the '128 patent is someone with experience in: (i) cable/satellite delivery architectures (including hybrid fiber-coax realities); (ii) distributed media delivery systems, and (iii) multi-region orchestration / routing (not just "storing files in databases"). Employing

Response, 22.

Patent Owner's Declarations

Dr. McCulloh:

- Does not satisfy PO's POSITA definition
 - No experience in cable and satellite-delivery architectures in the late 1990's; "probably started getting into [cable and satellite] around 2005"
 - No experience with distributed media delivery systems
- Analysis of "background" state of art did not include patent literature **at all**:

Q So you didn't do any searching of prior
patent publications or patents, things
like that?

A I did not search prior patents.

Ex.1017, 176:18-177:2, 39:2-42:20, 74:18-75:14; Ex.2009, ¶4; Reply, 7-8.