

U.S. PATENT NO. 11,871,088 CLAIM LISTING

No.	Limitation
1.0	A system, comprising:
1.1	at least one media source to receive an audio/video feed of a live event and provide a first copy of the audio/video feed of the live event from a first media server endpoint of the at least one media source; and
1.2	a webserver configured to:
1.3	transmit first instructions to a first client device that includes at least one first display, the first instructions transmitted by the webserver enabling the at least one first display of the first client device to render a first video relating to the live event and render first event information relating to the live event, wherein the first instructions transmitted by the webserver cause the first client device to:
1.4	connect to the first media server endpoint of the at least one media source to receive, on a first communication channel between the first media server endpoint and the first client device, the first copy of the audio/video feed of the live event;
1.5	connect to a first socket of a socket server to receive, on a second communication channel between the first socket and the first client device, first digital content corresponding to the first event information;
1.6	render, on the at least one first display of the first client device, at least some of the first event information as at least one first user-interactive feature overlaid on or adjacent to the first video relating to the live event; and
1.7	obtain access to first additional information relating to the live event and/or redirect to a first web site or first app when a first user selects at least a portion of the rendered at least one first user-interactive feature; and
1.8	transmit second instructions to a second client device that includes at least one second display, the second instructions transmitted by the webserver enabling the at least one second display of the second client device to also render the first event information relating to the live event, wherein the second instructions transmitted by the webserver cause the second client device to:
1.9	connect to the first socket of the socket server to receive, on a third communication channel between the first socket and the second client device, the first digital content corresponding to the first event information so that the first digital content received at the first client device and the second client device is synchronized and client-by-client latency between the first client device and second client device to render the first event information is thereby mitigated or significantly reduced;

1.10	render, on the at least one second display of the second client device, at least some of the first event information as at least one second user-interactive feature; and
1.11	obtain access to the first additional information or second additional information relating to the live event and/or redirect to the first web site, the first app, a second web site or a second app when a second user selects at least a portion of the rendered at least one second user-interactive feature.
2.0	The system of claim 1, wherein:
2.1	the at least one media source is configured to:
2.2	receive the audio/video feed of the live event;
2.3	provide the first copy of the audio/video feed of the live event from the first media server endpoint;
2.4	receive from the first client device a composite outgoing stream of the audio/video feed and additional video content; and
2.5	provide a first copy of the composite outgoing stream of the audio/video feed and the additional video content from a second media server endpoint of the at least one media source; and
2.6	the webserver is configured to transmit the second instructions to the second client device to cause the second client device to:
2.7	connect to the second media server endpoint to receive, on a fourth communication channel between the second media server endpoint and the second client device, the first copy of the composite outgoing stream.
3.0	The system of claim 2, wherein:
3.1	the at least one media source comprises at least one RTMP media server and at least one HLS server;
3.2	the first media server endpoint is coupled to the at least one HLS server;
3.3	the at least one RTMP media server is configured to receive the audio/video feed of the live event and transmit a first HLS copy of the audio/video feed of the live event from the at least one RTMP media server to the at least one HLS server; and
3.4	the at least one HLS server is configured to provide the first copy of the audio/video feed of the live event as another HLS copy from the first media server endpoint.
4.0	The system of claim 1, further comprising the socket server.

5.0	The system of claim 4, further comprising:
5.1	a control server, coupled to the socket server, to provide the first digital content corresponding to the first event information to the socket server.
6.0	The system of claim 1, wherein:
6.1	the live event is a sporting or gaming event; and
6.2	the first event information is online gaming information.
7.0	The system of claim 1, wherein:
7.1	the live event is a sporting or gaming event; and
7.2	the first event information is score information.
8.0	A method, comprising:
8.1	A) receiving, by at least one media source, an audio/video feed of a live event;
8.2	B) providing a first copy of the audio/video feed of the live event from a first media server endpoint of the at least one media source;
8.3	C) transmitting first instructions to a first client device that includes at least one first display to enable the at least one first display of the first client device to render a first video relating to the live event and render first event information relating to the live event, wherein the first instructions transmitted in C) cause the first client device to:
8.4	connect to the first media server endpoint of the at least one media source to receive, on a first communication channel between the first media server endpoint and the first client device, the first copy of the audio/video feed of the live event;
8.5	connect to a first socket of a socket server to receive, on a second communication channel between the first socket and the first client device, first digital content corresponding to the first event information;
8.6	render, on the at least one first display of the first client device, at least some of the first event information as at least one first user-interactive feature overlaid on or adjacent to the first video relating to the live event; and
8.7	obtain access to first additional information relating to the live event and/or redirect to a first web site or first app when a first user selects at least a portion of the rendered at least one first user-interactive feature; and

8.8	D) transmitting second instructions to a second client device that includes at least one second display to enable the at least one second display of the second client device to render the first event information relating to the live event, wherein the second instructions transmitted in D) cause the second client device to:
8.9	connect to the first socket of the socket server to receive, on a third communication channel between the first socket and the second client device, the first digital content corresponding to the first event information so that the first digital content received at the first client device and the second client device is synchronized and client-by-client latency between the first client device and second client device to render the first event information is thereby mitigated or significantly reduced;
8.10	render, on the at least one second display of the second client device, at least some of the first event information as at least one second user-interactive feature; and
8.11	obtain access to the first additional information or second additional information relating to the live event and/or redirect to the first web site, the first app, a second web site or a second app related to the live event when a second user selects at least a portion of the rendered at least one second user-interactive feature.
9.0	The method of claim 8, further comprising:
9.1	E) receiving, by the at least one media source from the first client device, a composite outgoing stream of the audio/video feed and additional video content; and
9.2	F) providing a first copy of the composite outgoing stream of the audio/video feed and the additional video content from a second media server endpoint of the at least one media source,
9.3	wherein D) further comprises transmitting the second instructions to the second client device to cause the second client device to:
9.4	connect to the second media server endpoint to receive, on a fourth communication channel between the second media server endpoint and the second client device, the first copy of the composite outgoing stream.
10.0	The method of claim 9, wherein:
10.1	the at least one media source comprises at least one RTMP media server and at least one HLS server;
10.2	the first media server endpoint is coupled to the at least one HLS server;

10.3	A) comprises receiving, by the at least one RTMP media server, the audio/video feed of the live event and transmitting a first HLS copy of the audio/video feed of the live event from the at least one RTMP media server to the at least one HLS server; and
10.4	B) comprises providing the first copy of the audio/video feed of the live event as another HLS copy from the first media server endpoint of the at least one HLS server to the first client device.
11.0	The method of claim 8, wherein:
11.1	the live event is a sporting or gaming event; and
11.2	the first event information is online gaming information.
12.0	The method of claim 8, wherein:
12.1	the live event is a sporting or gaming event; and
12.2	the first event information is score information.
13.0	A method, comprising:
13.1	A) receiving, by at least one media source, an audio/video feed of a live event;
13.2	B) providing a first copy of the audio/video feed of the live event from a first media server endpoint of the at least one media source to a first client device;
13.3	C) receiving, by the at least one media source from the first client device, a composite outgoing stream of the audio/video feed and additional video content;
13.4	D) providing a first copy of the composite outgoing stream of the audio/video feed and additional video content from a second media server endpoint of the at least one media source; and
13.5	E) transmitting first instructions to a second client device that includes at least one first display to cause the at least one first display of the second client device to render a first video relating to the live event and render first event information relating to the live event, wherein the first instructions transmitted in E) cause the second client device to:
13.6	connect to the second media server endpoint of the at least one media source to receive, on a first communication channel, the first copy of the composite outgoing stream;
13.7	render, on the at least one first display of the first client device, the first video relating to the live event based on the first copy of the composite outgoing stream;

13.8	connect to a socket of a socket server to receive, on a second communication channel different from the first communication channel, first digital content corresponding to the first event information; and
13.9	render, on the at least one first display of the first client device, at least some of the first event information based on the first digital content received on the second communication channel.
14.0	The method of claim 13, wherein:
14.1	the at least one media source comprises at least one RTMP media server and at least one HLS server;
14.2	A) comprises receiving, by the at least one RTMP media server, the audio/video feed of the live event and transmitting a first HLS copy of the audio/video feed of the live event from the at least one RTMP media server to the at least one HLS server; and
14.3	B) comprises providing the first copy of the audio/video feed of the live event as another HLS copy from the first media server endpoint of the at least one HLS server to the first client device.
15.0	The method of claim 13, wherein the first instructions transmitted in E) cause the second client device to:
15.1	obtain access to first additional information relating to the live event and/or redirect to a first web site or first app when a first user selects at least a portion of the rendered at least some of the first event information.
16.0	The method of claim 15, wherein:
16.1	the live event is a sporting or gaming event; and
16.2	the first event information is online gaming information.
17.0	The method of claim 15, wherein:
17.1	the live event is a sporting or gaming event; and
17.2	the first event information is score information.
18.0	The method of claim 13, further comprising:
18.1	F) transmitting second instructions to a third client device that includes at least one second display to enable the at least one second display of the second client device to render the first event information relating to the live event, wherein the second instructions transmitted in F) cause the third client device to:

18.2	connect to the socket of the socket server to receive, on a third communication channel between the socket and the third client device, the first digital content corresponding to the first event information.
19.0	The method of claim 18, wherein F) further comprises transmitting the second instructions to the third client device to enable the at least one second display of the third client device to render the first video relating to the live event and render the first event information relating to the live event, wherein the second instructions transmitted in F) cause the third client device to:
19.1	connect to the second media server endpoint to receive, on a fourth communication channel between the second media server endpoint and the third client device, the first copy of the composite outgoing stream.
20.0	The method of claim 19, wherein:
20.1	the second instructions transmitted in F) further cause the third client device to:
20.2	render, on the at least one second display of the third client device, the first video relating to the live event based on the first copy of the composite outgoing stream received on the fourth communication channel; and
20.3	render, on the at least one second display of the third client device, at least some of the first event information based on the first digital content received on the third communication channel.
21.0	The method of claim 20, wherein:
21.1	the first instructions transmitted in E) cause the second client device to obtain access to first additional information relating to the live event and/or redirect to a first web site or first app when a first user selects at least a portion of the rendered at least some of the first event information; and
21.2	the second instructions transmitted in F) cause the third client device to obtain access to the first additional information or second additional information relating to the live event and/or redirect to the first web site, the first app, a second web site or a second app related to the live event when a second user selects at least a portion of the rendered at least some of the first event information.
22.0	The method of claim 21, wherein:
22.1	the live event is a sporting or gaming event; and
22.2	the first event information is online gaming information.
23.0	The method of claim 21, wherein:

23.1	the live event is a sporting or gaming event; and
23.2	the first event information is score information.
24.0	A system, comprising:
24.1	at least one media source to:
24.2	receive an audio/video feed of a live event;
24.3	provide a first copy of the audio/video feed of the live event from a first media server endpoint of the at least one media source to a first client device;
24.4	receive from the first client device a composite outgoing stream of the audio/video feed and additional video content; and
24.5	provide a first copy of the composite outgoing stream of the audio/video feed and additional video content from a second media server endpoint of the at least one media source; and
24.6	a webserver to transmit first instructions to a second client device that includes at least one first display to cause the at least one first display of the second client device to render a first video relating to the live event and render first event information relating to the live event, wherein the first instructions transmitted by the webserver cause the second client device to:
24.7	connect to the second media server endpoint of the at least one media source to receive, on a first communication channel, the first copy of the composite outgoing stream;
24.8	render, on the at least one first display of the first client device, the first video relating to the live event based on the first copy of the composite outgoing stream;
24.9	connect to a socket of a socket server to receive, on a second communication channel different from the first communication channel, first digital content corresponding to the first event information; and
24.10	render, on the at least one first display of the first client device, at least some of the first event information based on the first digital content received on the second communication channel.
25.0	The system of claim 24, wherein the first instructions transmitted by the webserver cause the second client device to:
25.1	obtain access to first additional information relating to the live event and/or redirect to a first web site or first app when a first user selects at least a portion of the rendered at least some of the first event information.

26.0	The system of claim 24, wherein:
26.1	the live event is a sporting or gaming event; and
26.2	the first event information is online gaming information.
27.0	The system of claim 24, wherein:
27.1	the live event is a sporting or gaming event; and
27.2	the first event information is score information.
28.0	The system of claim 24, further comprising the socket server.
29.0	The system of claim 28, further comprising:
29.1	a control server, coupled to the socket server, to provide the first digital content corresponding to the first event information to the socket server.
30.0	The system of claim 24, wherein the webserver is configured to transmit second instructions to a third client device that includes at least one second display to enable the at least one second display of the third client device to render the first event information relating to the live event, wherein the second instructions transmitted by the webserver cause the third client device to:
30.1	connect to the socket of the socket server to receive, on a third communication channel between the socket and the third client device, the first digital content corresponding to the first event information.
31.0	The system of claim 30, wherein the webserver is configured to transmit the second instructions to the third client device to further enable the at least one second display of the third client device to render the first video relating to the live event and render the first event information relating to the live event, wherein the second instructions transmitted by the webserver cause the third client device to:
31.1	connect to the second media server endpoint to receive, on a fourth communication channel between the first media server endpoint and the third client device, the first copy of the composite outgoing stream.
32.0	The system of claim 31, wherein:
32.1	the first instructions transmitted by the webserver cause the second client device to obtain access to first additional information relating to the live event and/or redirect to a first web site or first app when a first user selects at least a portion of the rendered at least some of the first event information; and

32.2	the second instructions transmitted by the webserver cause the third client device to obtain access to the first additional information or second additional information relating to the live event and/or redirect to the first web site, the first app, a second web site or a second app related to the live event when a second user selects at least a portion of the rendered at least some of the first event information.
33.0	The system of claim 30, wherein:
33.1	the live event is a sporting or gaming event; and
33.2	the first event information is online gaming information.
34.0	The system of claim 30, wherein:
34.1	the live event is a sporting or gaming event; and
34.2	the first event information is score information.