

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GENIUS SPORTS LTD.,
Petitioner

v.

SPORTSCASTR INC.
(d/b/a PANDA Interactive),
Patent Owner.

IPR2024-01310 and -01311
U.S. Patent No. 11,039,218

**SUPPLEMENTAL DECLARATION OF DR. STEPHEN B. WICKER
UNDER 37 CFR 1.68 IN SUPPORT OF PETITIONER'S REPLY FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 11,039,218**

I, Dr. Stephen B. Wicker, declare as follows:

I. INTRODUCTION

1. My name is Stephen B. Wicker, Ph.D. I am Professor Emeritus of Electrical and Computer Engineering at Cornell University in Ithaca, New York. I have been retained on behalf of Genius Sports Ltd. to provide my opinions regarding the patentability of three patents involved in Inter Partes Reviews:

IPR2024-01305: involving claims 1-9 of USP 10,805,687

IPR2024-01307: involving claims 19-25 and 27-30 of USP 10,805,687

IPR2024-01308: involving claims 1-9 of USP 10,425,697

IPR2024-01309: involving claims 19-25 and 27-30 of USP 10,425,697

IPR2024-01310: involving claims 1-15 of USP 11,039,218

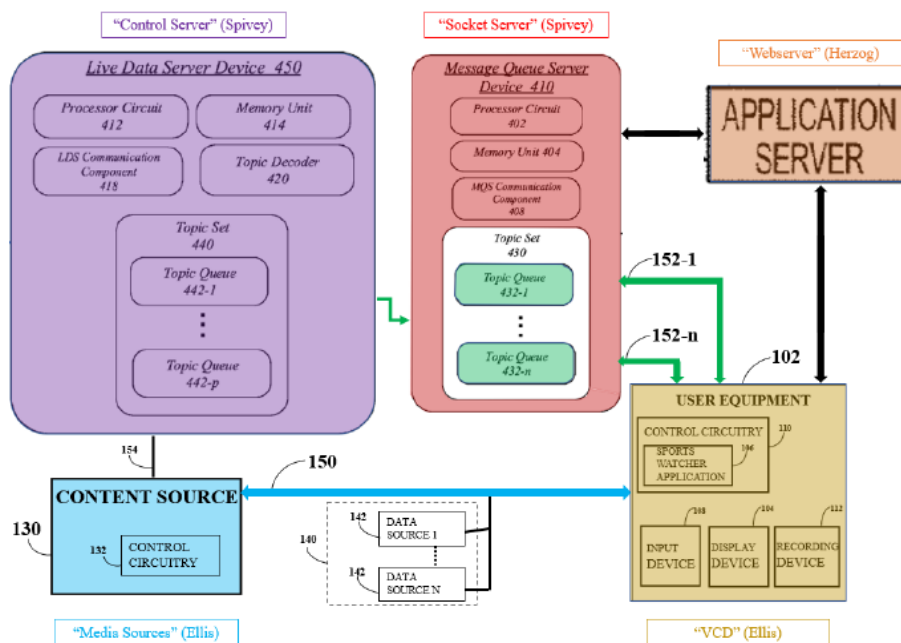
IPR2024-01311: involving claims 16-30 of USP 11,039,218

2. Below I provide my supplemental opinions responsive to the institution decisions, patent owner replies, and the supplemental declarations of Dr. Avi Rubin (Ex.1041) provided on behalf of Patent Owner in IPR2024-01310 and -01311. In preparing this declaration I have reviewed each of these documents, the documents cited therein, and the deposition transcript of Dr. Rubin, Ex.1063. My supplemental opinions directed to IPR2024-01305, -01307, -01308, and -01309 were provided in a separate declaration. The issues presented by the Patent Owner replies in IPR2024-01310 and -01311 substantially overlap the issues presented in the patent owner replies in IPR2024-01305, -01307, -01308, and -01309 with one exception I address below. In IPR2024-01310 Patent Owner contends that an “orchestrator-type

webserver is a radical deviation from [a] relay-type architecture” and that “a POSITA would not have understood Petitioner’s Ellis/Spivey combination to inherently include such orchestrator-type webserver.” I explain below why I disagree.

II. HERZOG RENDERS THE CLAIMED “WEBSERVER” OBVIOUS

3. As I discussed in my first declaration (Ex. 1001, ¶118), placing Herzog’s application server in the location shown below would enable it to facilitate communication by “receiving the request” from the user equipment (*i.e.*, a client device) and sending back synchronized, time-stamped meta-data via the MQSD, thereby addressing “latency issues”.



4. Such a configuration was well-known and widely used. This is confirmed by the textbook “Multimedia Communications and Networking,”

Marques da Silva, M., Ex. 1024 (“Marques da Silva”). Marques da Silva explains that a web service can be provided using a hierarchical structure where an application server acts as an orchestrator, routing requests and responses between clients and various backend services. He explains that:

the web server is responsible for establishing HTTP connections with remote client hosts. Any specific service required by a client is indirectly provided by the application server. In fact, the client only connects to the web server, but this server makes use of the application server to provide the desired service to the client.

Id., 462. This hierarchical structure allows for modularity, scalability, and efficient load distribution by enabling a web server such as Herzog’s application server to authenticate and direct client requests while delegating data retrieval or processing to specialized backend servers.

5. Given that Herzog already describes its application server (*i.e.*, web server) as an intermediary that receives client requests and interacts with the ERP server to obtain meta-data, a POSA would have recognized that allowing the client to communicate—directly or via controlled channels—with backend components was a predictable and routine variation—not a radical departure—leveraging established web service hierarchies to improve system flexibility and performance without departing from the core teachings of Herzog.

6. There is no radical difference between a web server architecture where the web server functions as a relay-type web server and one where it functions as an orchestrator-type web server because, at their core, both architectures rely on the web server as a central point for client interaction and resource delivery. The distinction between the two is primarily in the degree of involvement and coordination undertaken by the web server, rather than in a fundamental change in architecture or technology. In both architectures, the web server is the first point of contact for the client. Whether acting as a relay or orchestrator, the web server receives requests from clients (typically via HTTP or HTTPS) and responds with the necessary resources, such as web pages, scripts, or metafiles. As explained by Iacono, Ex.1068, 16:

The communication between the Web browser and the Web server will be the first to be executed, as for every website, via HTTP. After the web browser has downloaded the website, the JavaScript code on the Web Application will attempt to start the communication via WebSocket with the Media Server.

7. When arranged to function as a relay-type web server, it was understood that the web server acts as a straightforward intermediary, passing requests and responses between the client and backend resources (e.g., a server storing media files). Iacono explains that “[t]he basic concept behind HTTP progressive download is to playback the media content while the resource is being

downloaded from the Web server. This approach is also known as pull-based delivery.” *Id.*, 14.

8. When arranged to function as an orchestrator-type web server, the web server takes on additional responsibilities, for example, delivering client-side code that initiates further connections (*e.g.*, via WebSocket) or coordinating the sequence of actions required for advanced services like live streaming.

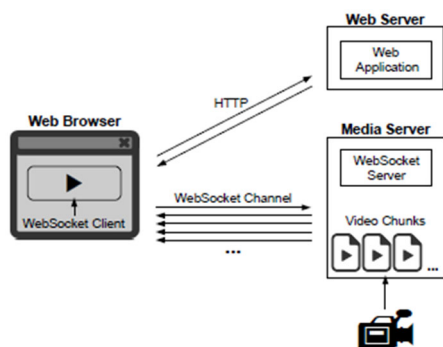


Figure 2: Proposed push-based architecture

However, this is an extension of the web servers relay function, not a replacement.

9. In my opinion, a POSA would have understood that, by integrating Herzog’s application server into the system disclosed by Ellis and Spivey, the resulting system would benefit from combining the “two types of data so that they display appropriately on a mobile device in correct time synchronization.” Ex.1015 ¶64. If, after receiving a request from a client application, Herzog’s application server facilitated delivery of metadata (*i.e.*, supplemental content) directly to the client—rather than relaying the supplemental content through itself—such an

arrangement would not have introduced additional processing or transmission delays that would undermine Herzog's synchronization techniques.

10. According to this orchestrator-type architecture, Herzog's application server (i.e., web server) would "satisf[y] time synchronization requirements between a client application residing in mobile device 45 and the solution integrator 44" but would not itself process or buffer the metadata stream. *Id.*, ¶51. Instead, the supplemental content would be timestamped and transmitted in parallel with the video stream, and "[b]oth types of data [] assembled in the mobile device 45 via the client application software that resides within the mobile device, for appropriate presentation on the device's display." *Id.*, ¶58.

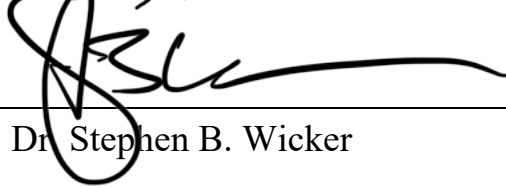
11. Under this approach, the web server's involvement would be limited to coordinating the initial request and providing the necessary addressing or instructions, after which the supplemental content would flow directly to the client. As a result, there would be no additional processing or transmission step that would introduce delay and Herzog's synchronization would be preserved, and the client device would remain responsible for matching the timestamps and presenting synchronized content. Thus, direct delivery of metadata after orchestration by the application server would align with Herzog's design without undermining its synchronization techniques.

III. CONCLUSION

12. I hereby declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct, and that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I understand that willful false statements are punishable by fine or imprisonment or both. *See* 18 U.S.C. §1001.

Date: August 29, 2025

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'S. B. Wicker', is written over a horizontal line. The signature is stylized with a large, circular initial 'S'.

Dr. Stephen B. Wicker