U.S. PATENT NO. 10,805,687 V/S SPORTRADAR Live Channel Trading

I. INTRODUCTION

The chart below demonstrates how Defendant Sportradar Group, AG ("Defendant" or "Sportradar") as well as Defendant's partners, customers, and end users of the products and features discussed below, directly infringe, either literally or under the doctrine of equivalents, at least claims 19 and 20 of U.S. Patent No. 10,805,687 ("the '687 Patent"). Defendant and Defendant's partners, customers, and end users directly infringe the identified claims at least by making, using, selling, installing, configuring to operate, importing, testing, and/or offering to sell at least Defendant's Sportradar Live Channel Trading and other offerings and services that integrate with Defendant's Sportradar Live Channel Trading (collectively, "the Accused Products") either alone, and/or when installed and operated as designed and intended on a computer system or network, as detailed below.

Each element of each asserted claim is presently alleged to be literally present. Because discovery has not started and the Asserted Claims have not yet been construed, SportsCastr Inc. (d/b/a PANDA Interactive) ("Plaintiff" or "PANDA") reserves the right to supplement its contentions, including with respect to the Doctrine of Equivalents as appropriate. In addition, any of Defendant's products that perform similar functions and/or incorporate or rely on the same or similar functionality (for example, without limitation, any predecessor or successor products performing the same functions in the same ways or products which use the same software, plugins, or libraries or call the functions underlying the operations identified below) as the Accused Products also infringe in the manner set out below.

Defendant directly infringes at least claims 19 and 20 of the '687 Patent, either literally or under the doctrine of equivalents, by making, using, offering to sell and selling the systems described below. Defendant's partners, customers, and end users of its Accused Products and corresponding systems and services directly infringe at least claims 19 and 20 of the '687 Patent, literally or under the doctrine of equivalents, at least by using the Accused Products and corresponding systems and services, as described below.

Defendant has actively induced and are actively inducing infringement of at least claims 19 and 20 of the '687 Patent with specific intent to induce infringement, and/or willful blindness to the possibility that its acts induce infringement, in violation of 35 U.S.C. § 271(b). For example, Defendants encourages and induces customers to use Sportradar emBET in a manner that infringes claims 19 and 20 of the '687 Patent at least by offering and providing the software and by engaging in activities relating to selling, marketing, advertising, promotion, installation, support, and distribution of the Accused Products.

Defendant encourages, instructs, directs, and/or requires third parties—including its certified partners and/or customers—to use the Accused Products in infringing ways. Defendants further encourages and induces its customers to infringe claims 19 and 20 of the

'687 Patent: 1) by widely advertising those services, and providing technical support and instructions to users, and 2) through activities relating to marketing, advertising, promotion, installation, support, and distribution of the Accused Products, including its video streaming software, and services in the United States. (*See* PANDA-SR_000063-PANDA-SR_000065, https://sportradar.com/sports-entertainment/audiovisual/embet/?lang=en-us.) Further, as the entity that provides installation, implementation, and integration of the Accused Products in addition to ensuring the Accused Product remains operational for each customer through ongoing technical support, on information and belief, Defendant and/or its partners affirmatively aid and abet each customer's use of the Accused Products in a manner that infringes the '687 Patent.

Defendant also contributes to the infringement of its partners, customers, and end-users of the Accused Products by providing within the United States or importing into the United States the Accused Products, constituting a material part of the inventions claimed, and not a staple article or commodity of commerce suitable for substantial non-infringing uses. Indeed, as shown below, the Accused Products have no substantial non-infringing uses because the accused functionality, including the one-to-many socket architecture and separate channels for video and event information, is an integral part of the Accused Products and must be performed for the Accused Products to perform their intended purpose. These functionalities are continually running when the system is in use and, on information and belief, cannot be removed or disabled (or, if they could, the system would no longer suitably function for its intended purpose). Moreover, for the same reasons, without the system and components identified below that practice the '687 Patent, that functionality could not be performed. Additionally, the accused functionality, including the one-to-many socket architecture and separate channels for video and event information, itself has no substantial non-infringing uses because the components, modules and methods identified below are a necessary part of that functionality. For example, without the on-to-many socket architecture, the Accused Products could not effectively synchronize the event information across multiple viewers. These functionalities are continually running when the system is in use and cannot be removed or disabled (or, if they could, the system would no longer suitably function for its intended purpose). Moreover, for the same reasons, without the system and components identified below that practice claimed in the '687 Patent, that functionality could not be performed.

Indeed, as shown below, the Accused Products have no substantial non-infringing uses because the accused functionality is an integral part of the Accused Products and must be performed for the Accused Products to perform their intended purpose. For example, at least the functionalities and corresponding modules (whether software and/or hardware) described below have no suitable non-infringing use and form a material part of the Accused Products. In other words, when each of the Accused Products operates, the functions below are performed. Moreover, when the functionality and modules specifically described below are operated, they perform the steps described below. The Accused Products (and the specific modules and functionalities described herein) are designed and intended specifically to perform the inventions claimed in the Asserted Claims, and do not have any other purpose. For example, the

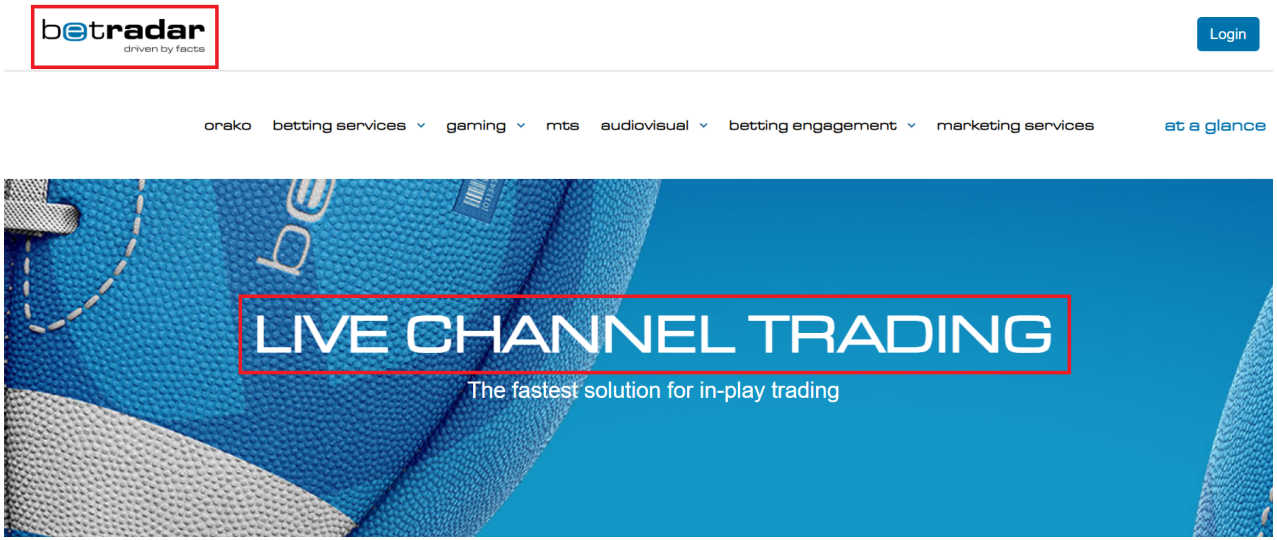
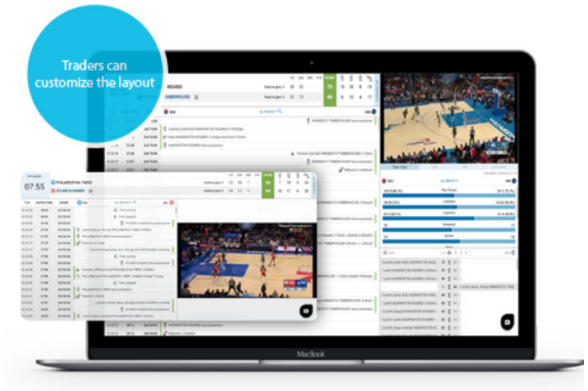
Accused Products and accused functionalities (e.g., the one-to-many architecture) constitute a material part of the inventions claimed because such architecture is integral to the system as recited in the claims of the '687 Patent. None of these products are staple goods—they are sophisticated and customized video streaming products, methods, and systems.

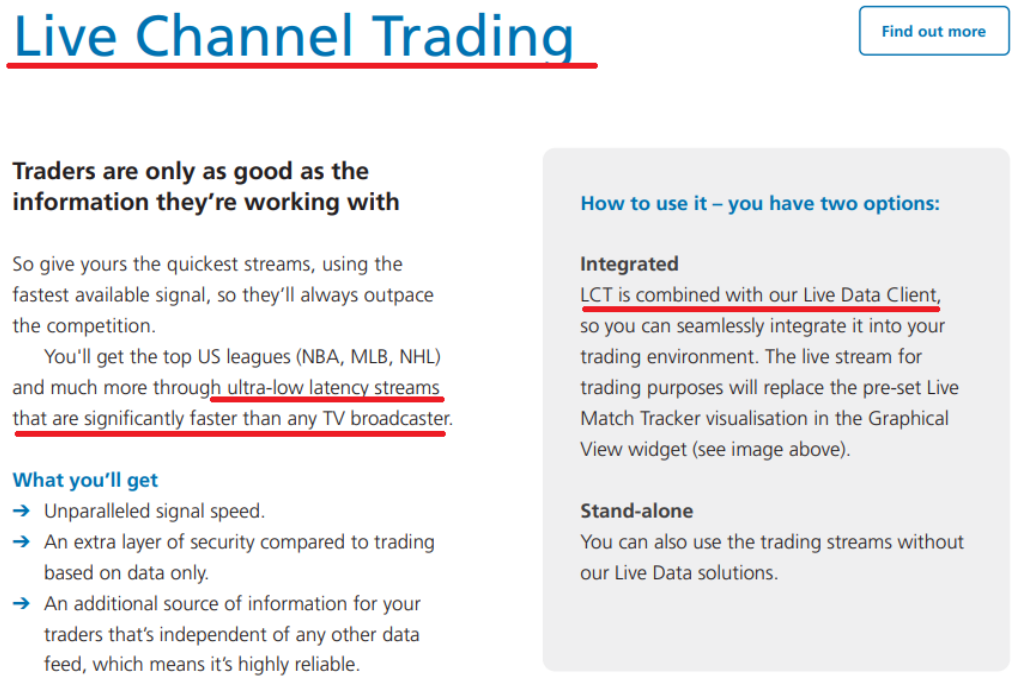
Plaintiff provides the following example claim charts based on currently available information, including through public sources. Plaintiff reserves the right to modify, amend, or supplement these claim charts should it become aware of additional information regarding the Accused Products and systems, including through discovery, or should one or more claims be construed in a manner differently than interpreted herein.

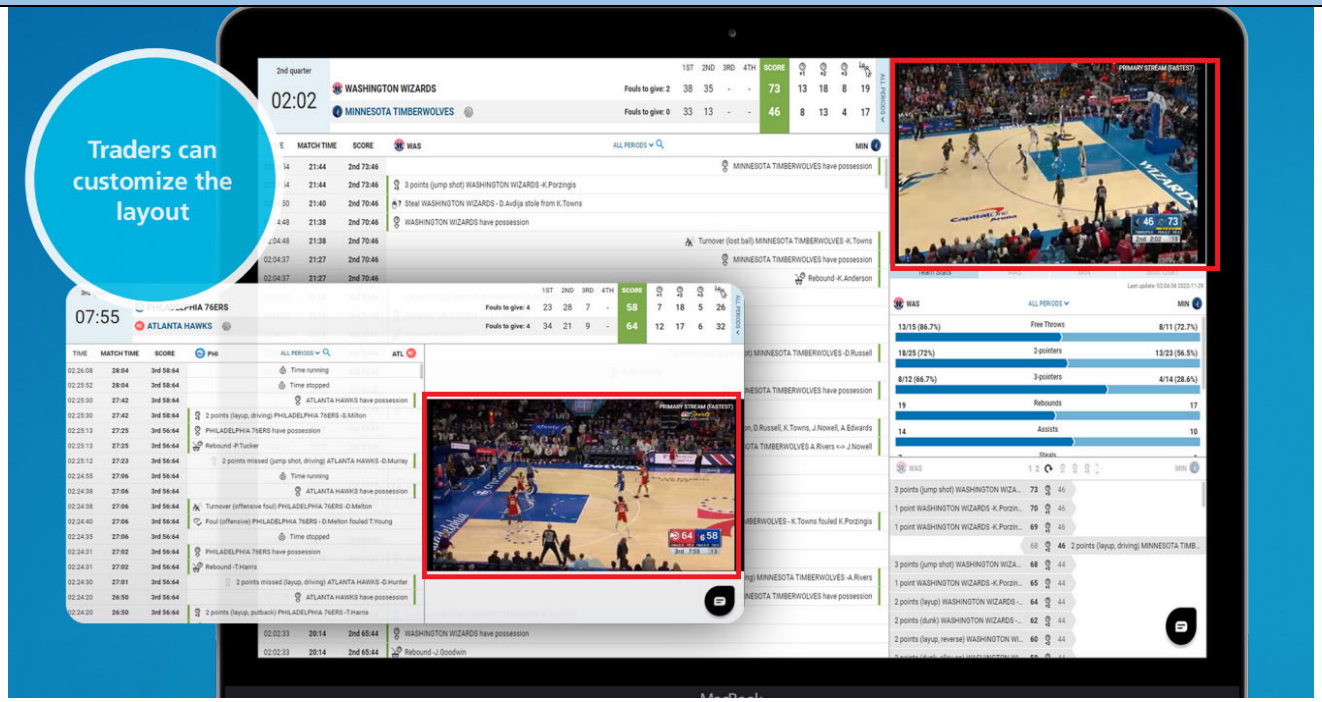
I. CLAIM CHARTS

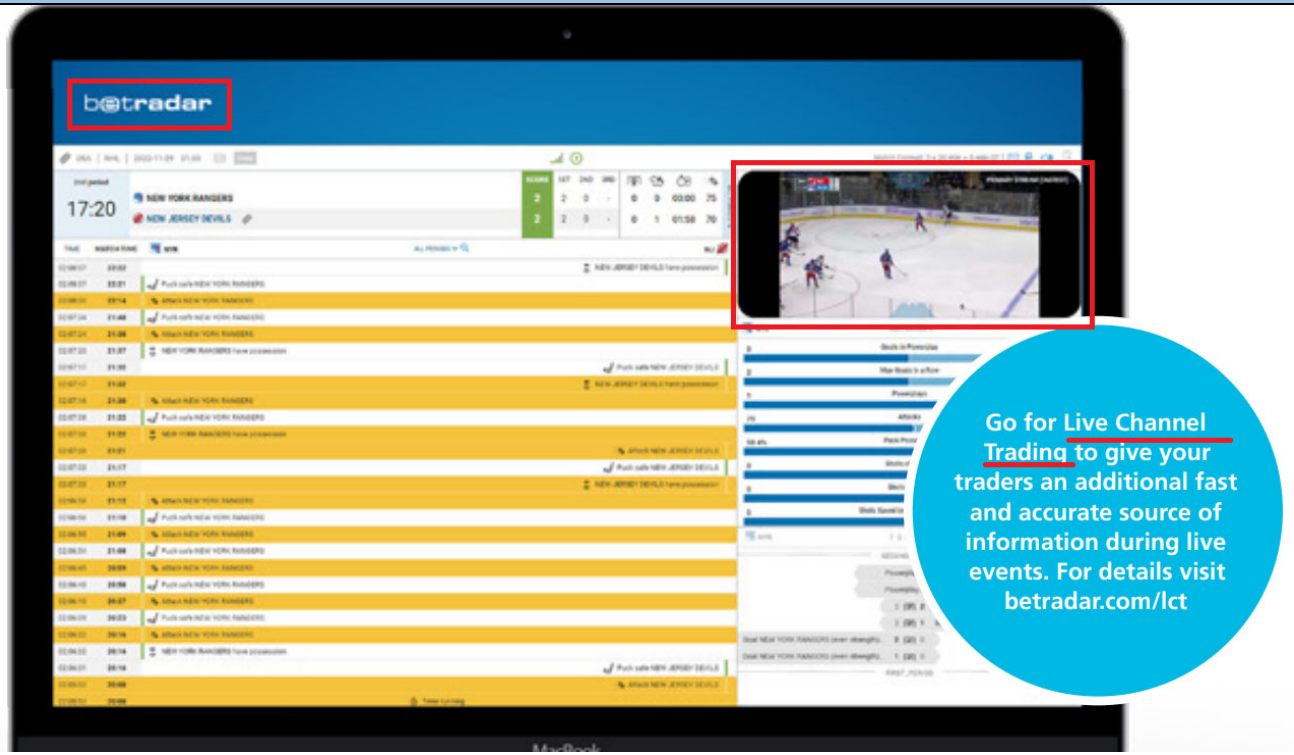
1. Independent Claim 19

Key Features	Accused Product
19. A system for providing a first plurality of copies of a first live stream of digital content relating to a first live sporting event to a first plurality of viewer client devices, and for providing a second plurality of copies of a second live stream of digital content relating to a second live sporting event to a second plurality of viewer client devices, the system comprising:	Sportradar Live Channel Trading, which is offered under their brand name Betradar, includes "*a system for providing a first plurality of copies of a first live stream of digital content relating to a first live sporting event to a first plurality of viewer client devices, and for providing a second plurality of copies of a second live stream of digital content relating to a second live sporting event to a second plurality of viewer client devices*." For example, Sportradar live channel trading provides videos, including live videos to traders, integrated with a trading environment. Multiple live events are streamed to multiple clients.

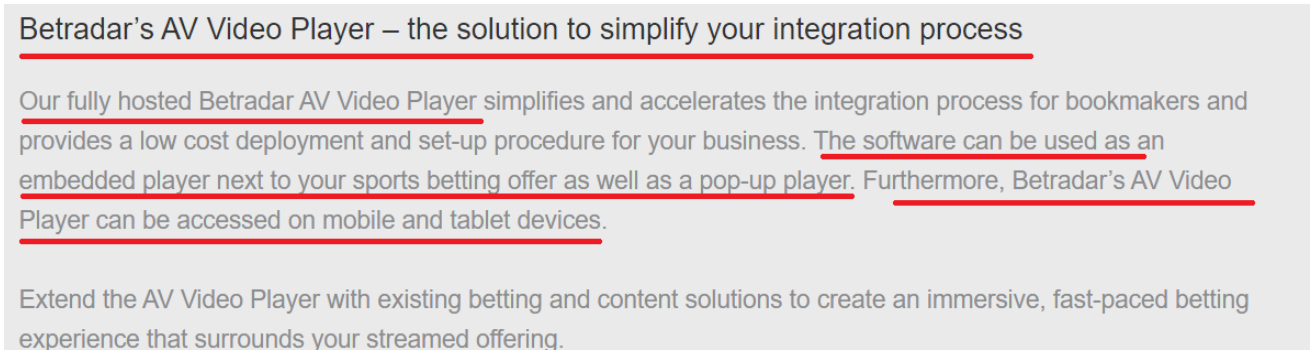
Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/* LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/*

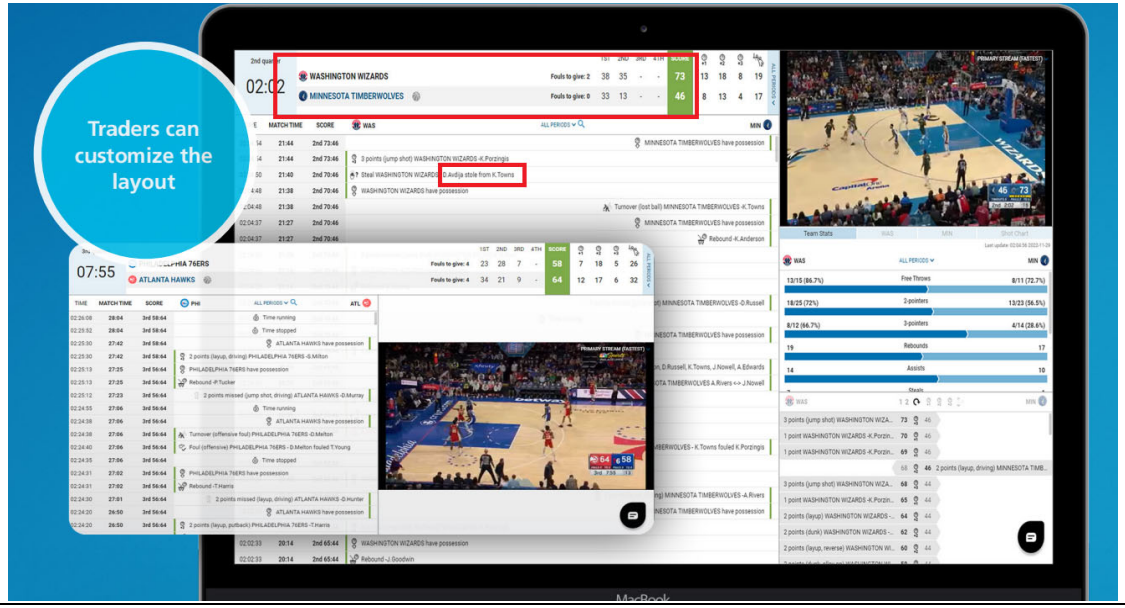
Key Features	Accused Product
	As shown, Sportradar's Live Channel Trading provides matches using its live video streaming system that offers ultra-low latency.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*

Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*

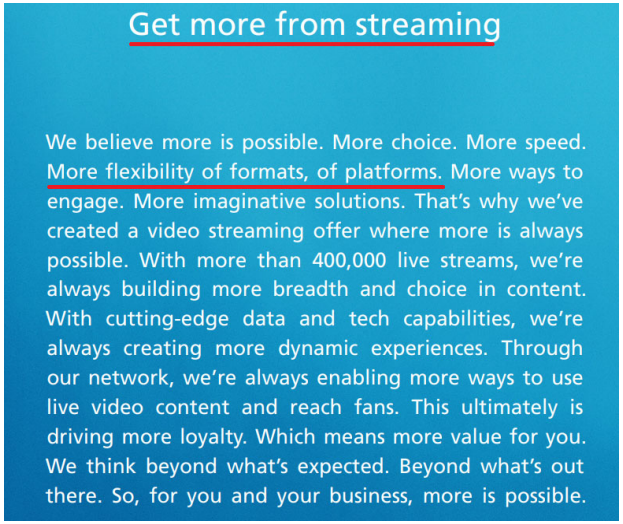
Key Features	Accused Product
	 *See,* https://betradar.com/wp-content/uploads/sites/4/2023/02/Betradar-Product-Brochure-2023.pdf

Key Features	Accused Product
	 See, *https://sportradar.com/case-study-mlb/?lang=en-us* The images below explains that Sportradar's Live Channel Trading provides sporting events via live streaming over a communication channel and that the live stream can be provided in a variety of data formats (e.g., MPEG-DASH, MP4).

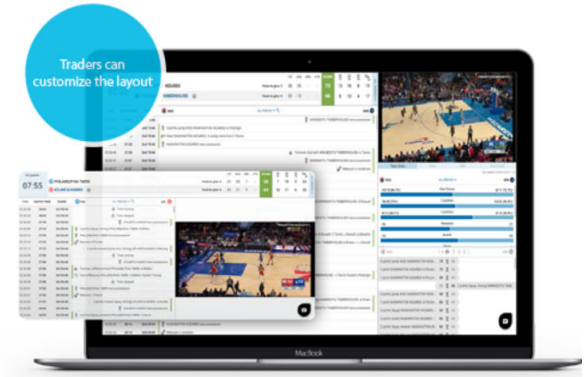
Key Features	Accused Product
	 See, PANDA-SR_000029 at PANDA-SR_000030, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf* As shown, Sportradar's Live Channel Trading provides an AV Video Player that can be used as an embedded player next to sports betting offer as well as a pop-up player.  *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*

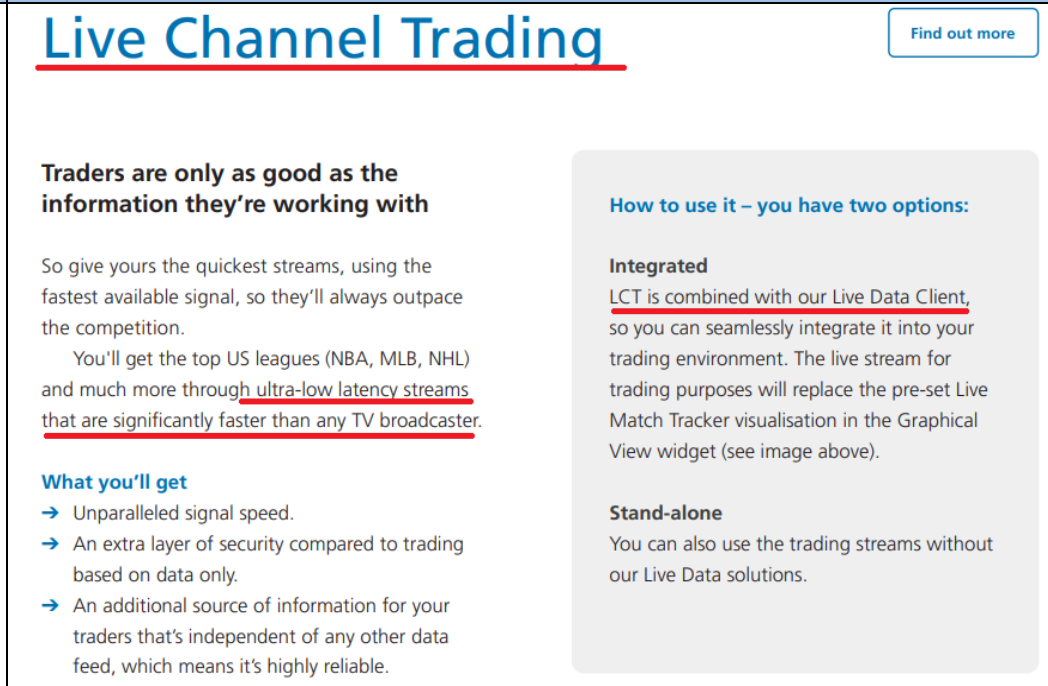
Key Features	Accused Product
	As shown below, Sportradar's Live Channel Trading's AV Video Player supports multiple formats and is streamed from a media source to a user device, such as a desktop or mobile browser *("plurality of viewer client devices)*". **The benefits of Betradar's AV Video Player** **1. HTML-5 Player with broad format support** You receive one dedicated player for all necessary video streaming formats across any desktop and mobile browser, including HLS, MPEG-DASH, WebRTC, RTMP and MP4. *See,* PANDA-SR_000110, *https://www.betradar.com/news-archive/the-top-10-benefits-of-our-new-audio-visual-player/* 

Key Features	Accused Product
	See, PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
A) a plurality of media sources to:	Sportradar Live Channel Trading includes "*a plurality of media sources.*" Sportradar has an in-house video delivery network (VDN) that provides live video streaming to customers. Further, all the Audio-Visual products (including Live Channel Trading) use an Audio-Visual (AV) video player developed by Sportradar. LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest. *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/*

Key Features	Accused Product
	Betradar's AV Video Player – the solution to simplify your integration process Our fully hosted Betradar AV Video Player simplifies and accelerates the integration process for bookmakers and provides a low cost deployment and set-up procedure for your business. The software can be used as an embedded player next to your sports betting offer as well as a pop-up player. Furthermore, Betradar's AV Video Player can be accessed on mobile and tablet devices. Extend the AV Video Player with existing betting and content solutions to create an immersive, fast-paced betting experience that surrounds your streamed offering. *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*  *See,* PANDA-SR_000029 at PANDA-SR_000030, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*

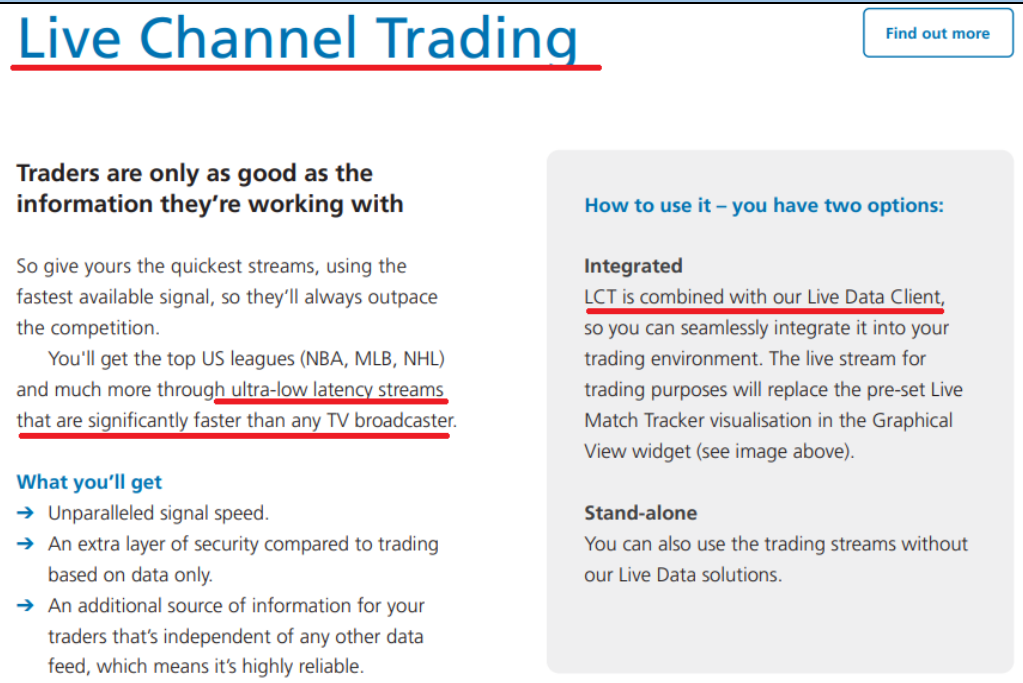
Key Features	Accused Product
	The benefits of Betradar's AV Video Player **1. HTML-5 Player with broad format support** You receive one dedicated player for all necessary video streaming formats across any desktop and mobile browser, including HLS, MPEG-DASH, WebRTC, RTMP and MP4. *See,* PANDA-SR_000110, *https://www.betradar.com/news-archive/the-top-10-benefits-of-our-new-audio-visual-player/*
receive the first live stream of digital content and the second live stream of digital content;	Sportradar Live Channel Trading includes "*a plurality of media sources to … receive the first live stream of digital content and the second live stream of digital content.*" For example, Sportradar Live Channel Trading, which is offered under their brand name Betradar, provides videos, including live videos to traders, integrated with a trading environment. Multiple live events are streamed, to multiple clients. headquarters in St. Gallen, international company analyzes sports data and cluding live results and fers white-label digital olutions for bookmakers, s and media companies public Internet for contributing much of its live stream content. Today, Betradar Live Channel receives more than 35,000 IP streams from a large number of venues and production sites across the globe for these sporting events in broadcast quality and ingests the video signal into its data *See,* PANDA-SR_000184, *https://www.ibm.com/aspera/pdfs/Sportradar_AsperaCS_2017.pdf*

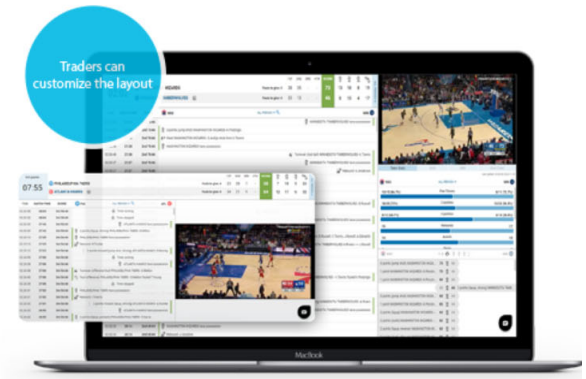
Key Features	Accused Product
	LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/* Betradar's AV Video Player – the solution to simplify your integration process Our fully hosted Betradar AV Video Player simplifies and accelerates the integration process for bookmakers and provides a low cost deployment and set-up procedure for your business. The software can be used as an embedded player next to your sports betting offer as well as a pop-up player. Furthermore, Betradar's AV Video Player can be accessed on mobile and tablet devices. Extend the AV Video Player with existing betting and content solutions to create an immersive, fast-paced betting experience that surrounds your streamed offering. *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*

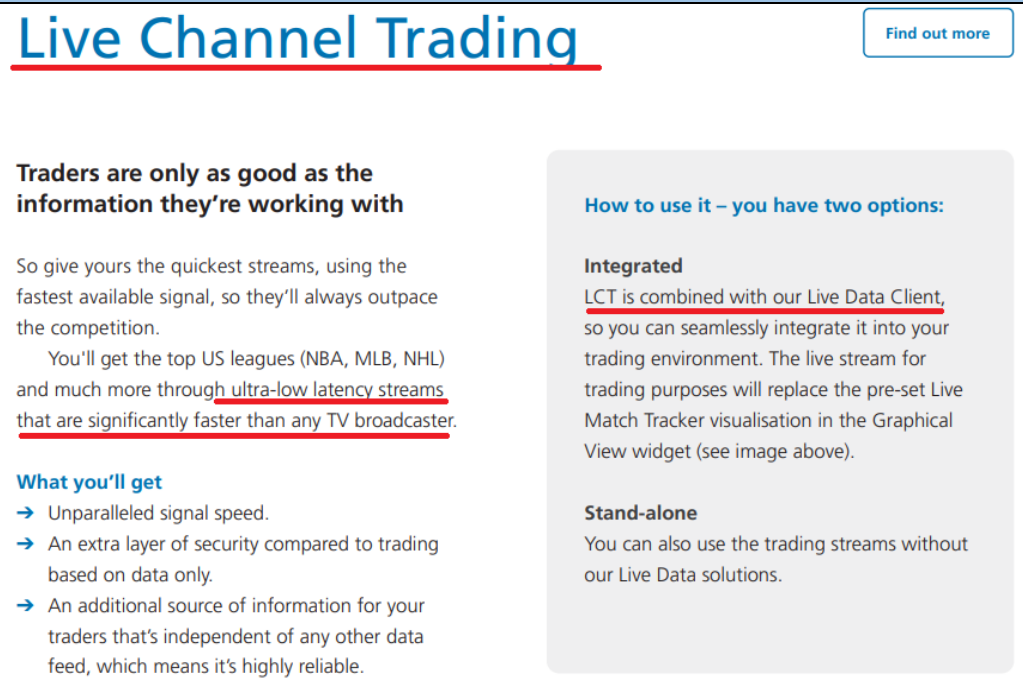
Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*

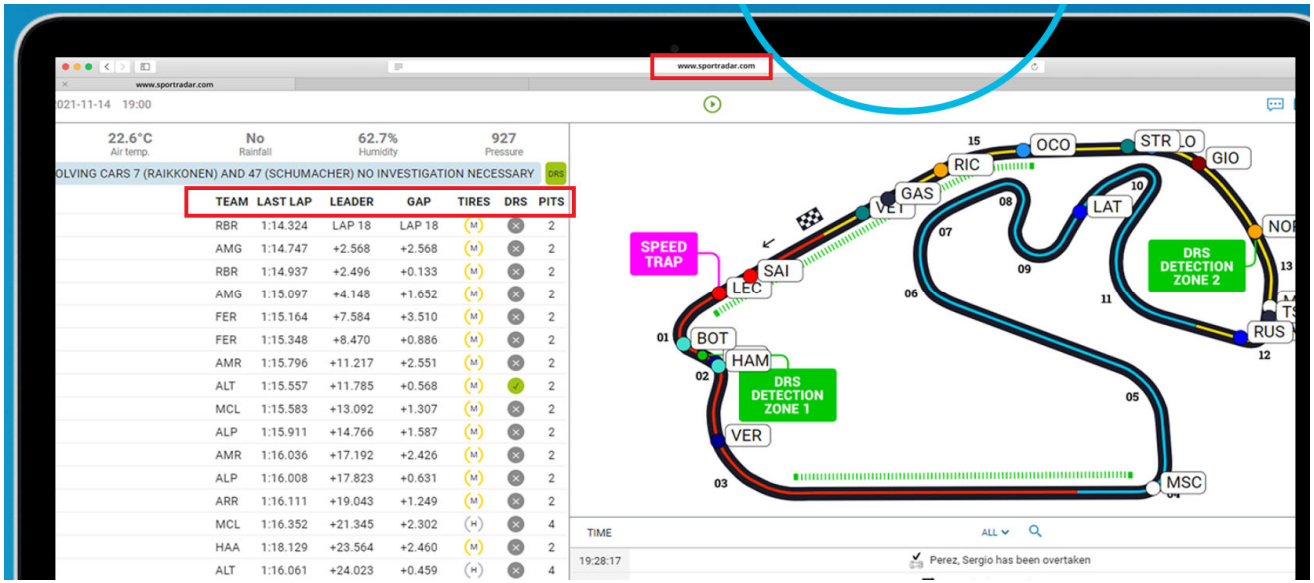
Key Features	Accused Product
	Unrivalled data depth to support more betting markets A sportsbook lives or dies on data. To cover a multitude of sports and markets, the data you use has to be accurate, rapid, secure and plentiful. That's exactly what you get with us. For over a decade, our 9,500 data journalists have been collecting more live data than anyone else in the business, across 35 data applications and feeds, covering more than 30 sports. That all floods into an offering the gaming industry relies on: the Betradar Live Data Service. Welcome to the beating heart of live sports data. **What to expect** Up to 780,000 events a year - and rising 30+ sports and esports Most events covered directly from the venue and delivered within two seconds 9,500 local data journalists plus 12,000 umpires and referees, so you can trade practically any major live event in the world Data transmitted by our unique in-house apps means you're guaranteed accuracy and security Choose from either our Live Data XML feed, tailor-made for your needs, or the Live Data Client, our web-based graphical interface *See,* PANDA-SR_000113 at PANDA-SR_000114, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*
provide a first copy of the first plurality of copies to a first viewer client device of the first plurality of viewer client devices via a first Internet	Sportradar Live Channel Trading includes "*a plurality of media sources to … provide a first copy of the first plurality of copies to a first viewer client device of the first plurality of viewer client devices via a first Internet communication channel between the plurality of media sources and the first viewer client device of the first plurality of viewer client devices.*"

Key Features	Accused Product
communication channel between the plurality of media sources and the first viewer client device of the first plurality of viewer client devices; and	For example, Sportradar Live Channel Trading provides videos, including live videos to traders, integrated with a trading environment. Multiple live events are streamed to multiple clients. It provides the live sporting event stream to a user's computer, laptop, smartphone, or tablet using live channels. LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest. *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/* Betradar's AV Video Player – the solution to simplify your integration process Our fully hosted Betradar AV Video Player simplifies and accelerates the integration process for bookmakers and provides a low cost deployment and set-up procedure for your business. The software can be used as an embedded player next to your sports betting offer as well as a pop-up player. Furthermore, Betradar's AV Video Player can be accessed on mobile and tablet devices. Extend the AV Video Player with existing betting and content solutions to create an immersive, fast-paced betting experience that surrounds your streamed offering. *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*

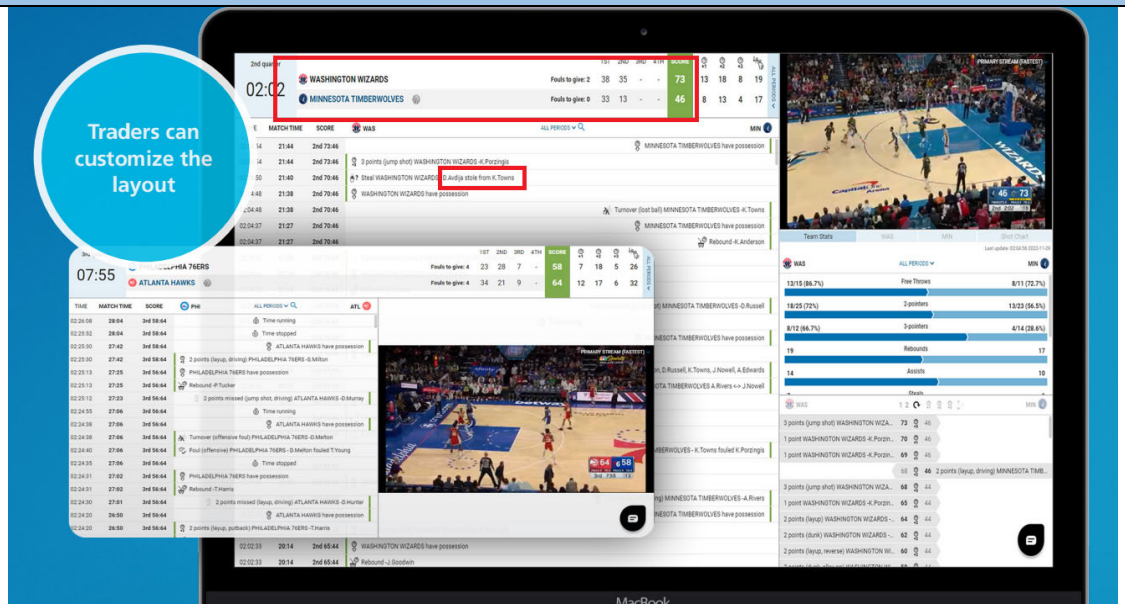
Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
provide a first copy of the second plurality of copies to a first viewer client device of the second plurality of viewer client devices via a second Internet communication channel between the plurality of media sources	Sportradar Live Channel Trading includes "*a plurality of media sources to … provide a first copy of the second plurality of copies to a first viewer client device of the second plurality of viewer client devices via a second Internet communication channel between the plurality of media sources and the first viewer client device of the second plurality of viewer client devices.*" Sportradar Live Channel Trading provides videos, including live videos to traders, integrated with a trading environment. Multiple live events are streamed, to multiple clients. It provides the live sporting event stream to a user's computer, laptop, smartphone, or tablet using live channels.

Key Features	Accused Product
and the first viewer client device of the second plurality of viewer client devices;	LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/* Betradar's AV Video Player – the solution to simplify your integration process Our fully hosted Betradar AV Video Player simplifies and accelerates the integration process for bookmakers and provides a low cost deployment and set-up procedure for your business. The software can be used as an embedded player next to your sports betting offer as well as a pop-up player. Furthermore, Betradar's AV Video Player can be accessed on mobile and tablet devices. Extend the AV Video Player with existing betting and content solutions to create an immersive, fast-paced betting experience that surrounds your streamed offering. *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*

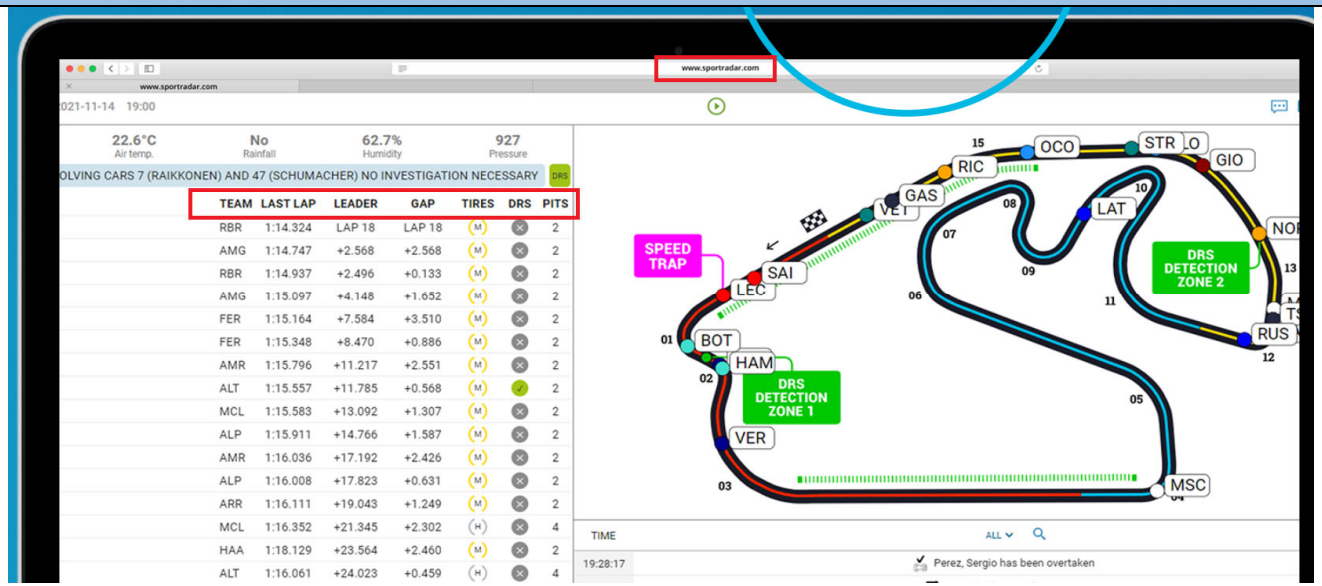
Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
B) a control server to periodically retrieve, via the Internet, first event information germane to the first live sporting event and second event information germane to the second live sporting event; and	Sportradar Live Channel Trading includes "*a control server to periodically retrieve, via the Internet, first event information germane to the first live sporting event and second event information germane to the second live sporting event.*" For example, Sportradar Live Channel Trading provides videos, including live videos to traders, integrated with a trading environment. Sportradar Live Channel Trading also provides information to users, such as Milestones, Leaderboards, Highs, Probabilities, team information (e.g., team names, abbreviations and/or logos), score information (e.g., with essentially real-time score updates synchronized with the video-based commentary), player information, venue information, and game status

Key Features	Accused Product
	information (e.g., on-base, at-bat, timeouts, fouls, pole position, yards-to-go, yards-to-goal, down, team statistics, player statistics, historical data, etc.). This information is periodically retrieved by the highly qualified data journalist and ultra-reliable software.  *See,* PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* **Underpinned by the largest network of data journalists in the world** Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control.

Key Features	Accused Product
	See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest. *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/*

Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
C) at least one socket server communicatively coupled to the control server to:	Upon information and belief, Sportradar Live Channel Trading includes "*at least one socket server communicatively coupled to the control server*."

Key Features	Accused Product



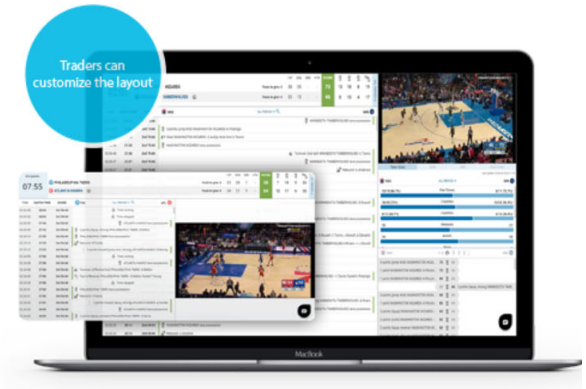
See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

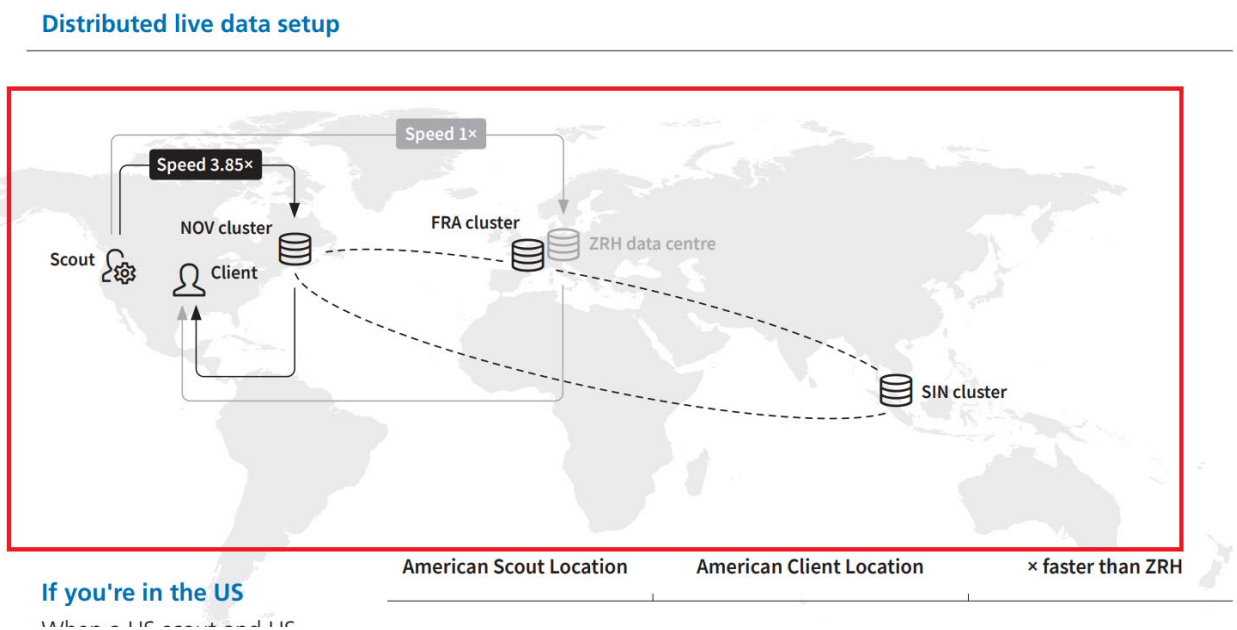
Underpinned by the largest network of data journalists in the world

Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control.

See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

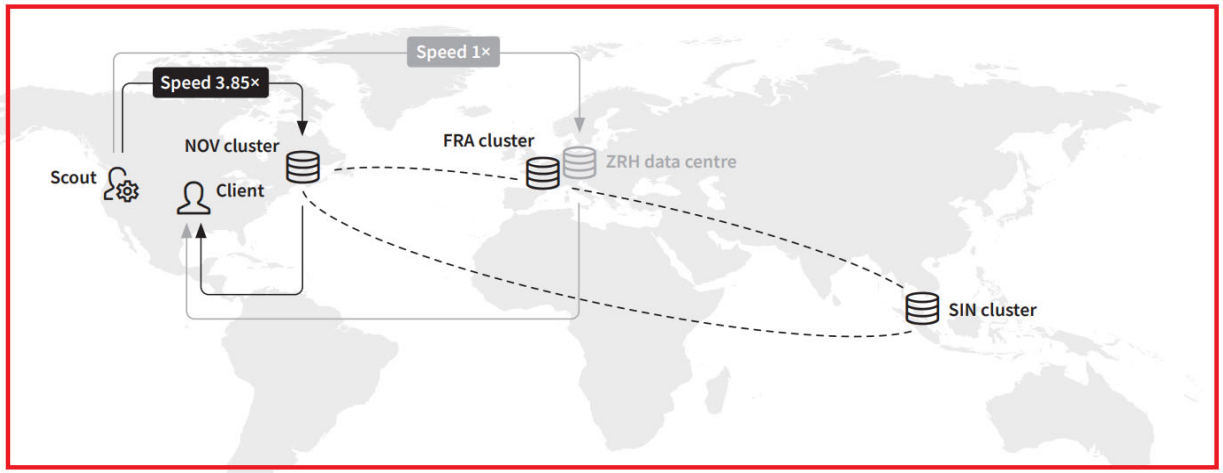
For example, Sportradar Live channel trading's live data intelligence provides game statistics and play-by-play action as well as real-time analysis of data streams from sporting events. "Sportradar distributes

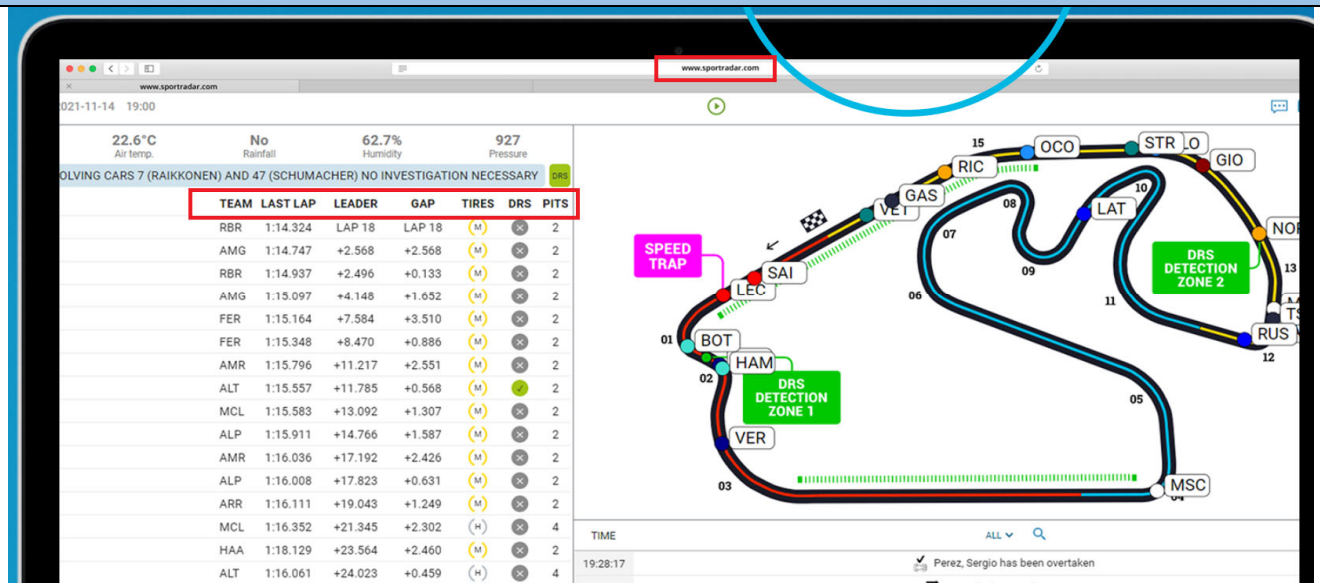
Key Features	Accused Product
	live video from a vast array of rights holders to betting operators around the world. Customers receive this intelligence as data feeds that integrate into their applications or betting systems or as live video streams distributed over internet protocol (IP) networks." LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/*

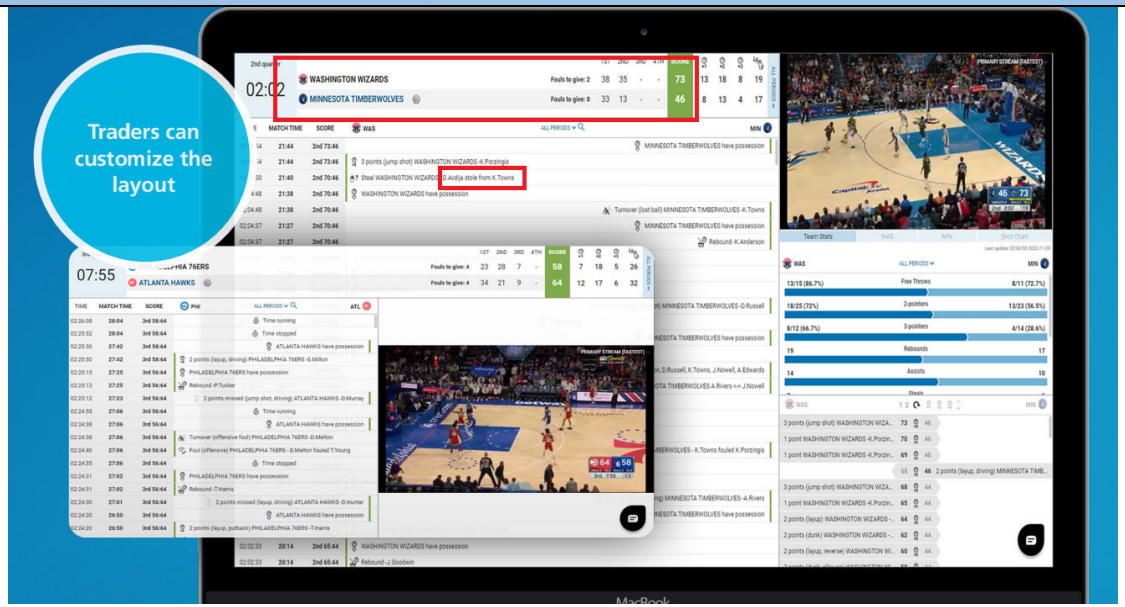
Key Features	Accused Product
	 *See,* PANDA-SR_000113 at PANDA-SR_000116, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* Sportsradar uses sports data API, which involves creating a persistent connection to push feeds to the customer. As shown below, an active connection to the customer is maintained even when no data is provided, e.g., using a heartbeat message every 5 seconds.

Key Features	Accused Product
	Push Feeds Some of our APIs include Push feeds that allow you to get updates as soon as they are available. Push API feeds automatically send JSON payload to you via a push service, and can dramatically reduce the number of calls you need to make to our RESTful API feeds. The structure of the Push feeds are similar to the structure of the corresponding RESTful API feed (i.e. Push Events, and Push Statistics). The push service ensures reliable and efficient delivery of the most up to date information. Our Push services are based on a HTTP publish/subscribe model. When making a call to the Push APIs, you "subscribe" to various data feeds provided by our service; whenever new content is available on one of those feeds, the server pushes that information out to your client. When no new information is available on the feed, a heartbeat message is sent every 5 seconds to keep the connection active. If you want to filter the results of the feeds, there are several optional query string parameters that can be applied to the API call. If left unfiltered, all data for the feed is displayed (i.e. all games, events, or statistics). *See,* PANDA-SR_000118 at PANDA-SR_000151, *https://developer.sportradar.com/docs/read/american_football/NFL_v7#weekly-depth-charts* For your applications to accept data from our Push feeds, ensure that your application can: • Can follow a HTTP redirect or use the location provided in the feeds header within one minute of your initial request. • Can accept HTTP data transfer encoded as chunked. Our Push service does not provide a "stateful session", there is no memory of what data has been sent previously. If you are disconnected from the Push session, you can use the RESTful API to catch up or recover from the disconnection.

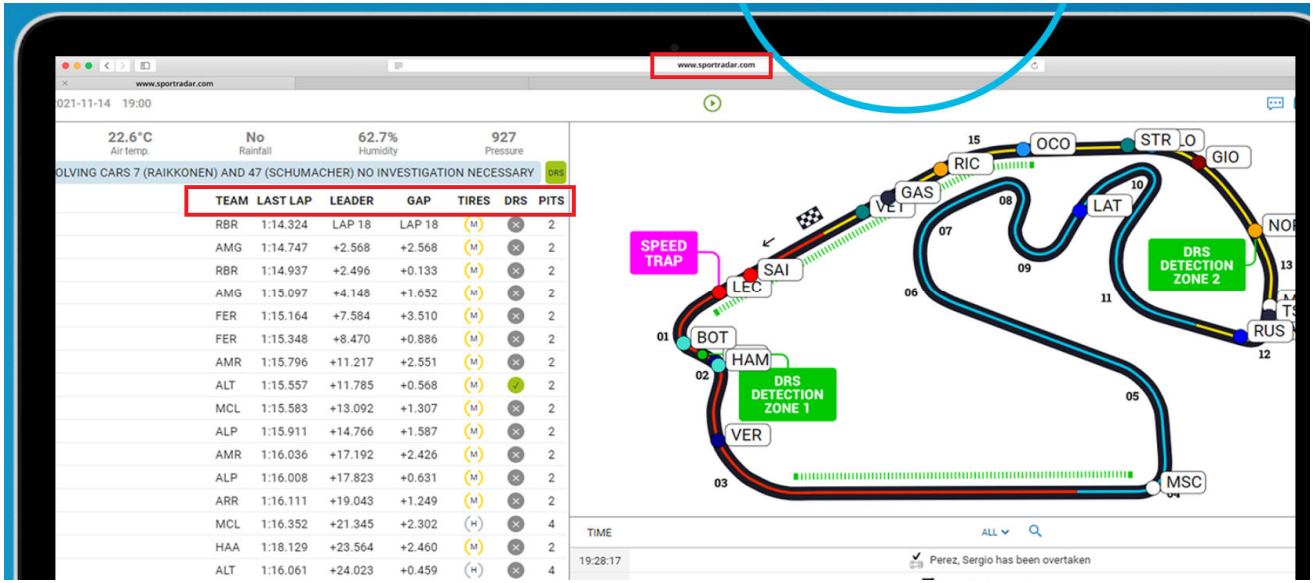
Key Features	Accused Product
	See, PANDA-SR_000118 at PANDA-SR_000151, *https://developer.sportradar.com/docs/read/american_football/NFL_v7#weekly-depth-charts*
receive from the control server at least some of the first event information and at least some of the second event information; and	Sportradar Live Channel Trading includes "*at least one socket server communicatively coupled to the control server to … receive from the control server at least some of the first event information and at least some of the second event information.*" For example, Sportradar Live channel trading's live data intelligence provides game statistics and play-by-play action as well as real-time analysis of data streams from sporting events. Sportradar distributes live video from a vast array of rights holders to betting operators around the world. Customers receive this intelligence as data feeds that integrate into their applications or betting systems or as live video streams distributed over internet protocol (IP) networks. The intelligence, including, e.g., Milestones, Leaderboards, Highs, Probabilities, team information (e.g., team names, abbreviations and/or logos), score information, etc., is different for different live stream events and a socket server, upon information and belief, receives the intelligence to be transmitted to respective customers.

Key Features	Accused Product
	Distributed live data setup  If you're in the US *See,* PANDA-SR_000113 at PANDA-SR_000116, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

Key Features	Accused Product
	 *See,* PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* **Underpinned by the largest network of data journalists in the world** Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control. *See,* PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
transmit the at least some of the first event information to the first viewer client device of the first plurality of viewer client devices via a third Internet communication channel between at least one first event socket of the at least one socket server and the first viewer client device of the first	Sportradar Live Channel Trading includes "*at least one socket server communicatively coupled to the control server to … transmit the at least some of the first event information to the first viewer client device of the first plurality of viewer client devices via a third Internet communication channel between at least one first event socket of the at least one socket server and the first viewer client device of the first plurality of viewer devices.*" For example, Sportradar Live channel trading's live data intelligence provides game statistics and play-by-play action as well as real-time analysis of data streams from sporting events. Sportradar distributes live video from a vast array of rights holders to betting operators around the world. Customers receive this intelligence as data feeds that integrate into their applications or betting systems or as live video streams distributed over internet protocol (IP) networks. The intelligence, including e.g., Milestones, Leaderboards, Highs, Probabilities, team information (e.g., team names, abbreviations and/or logos),

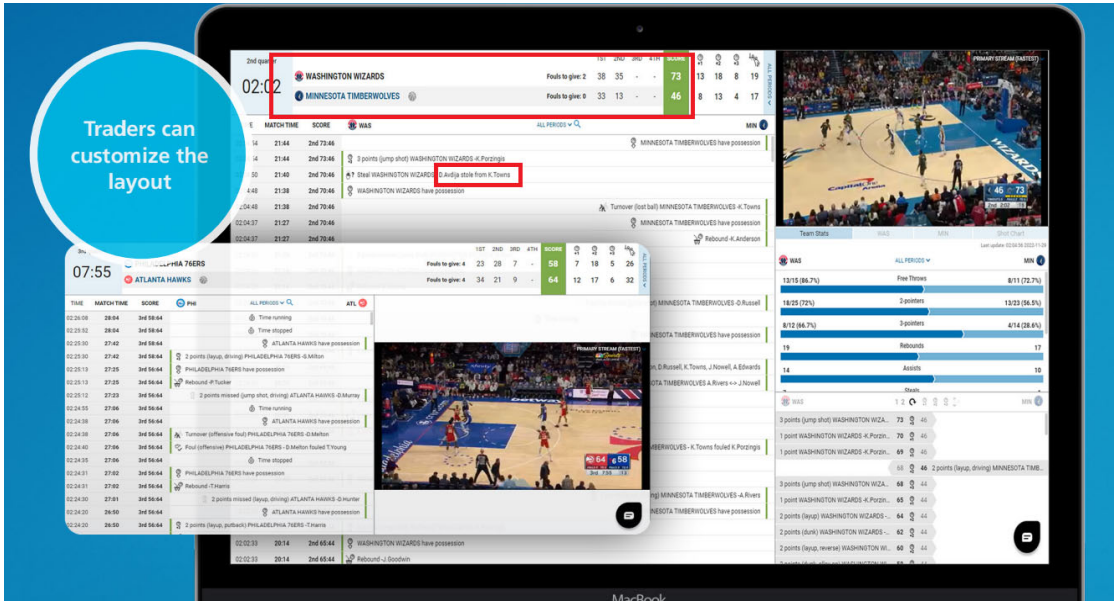
Key Features	Accused Product
plurality of viewer devices; and	score information, etc., is different for different live stream events and a socket server, upon information and belief, receives the intelligence to be transmitted to respective customers.

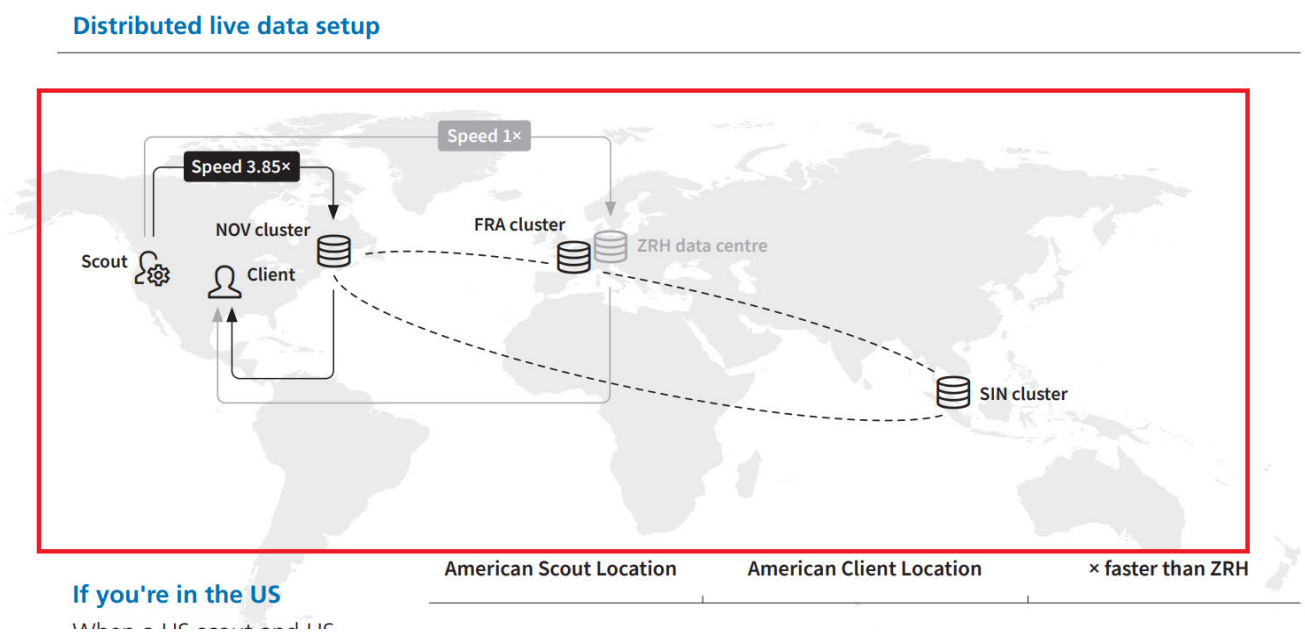


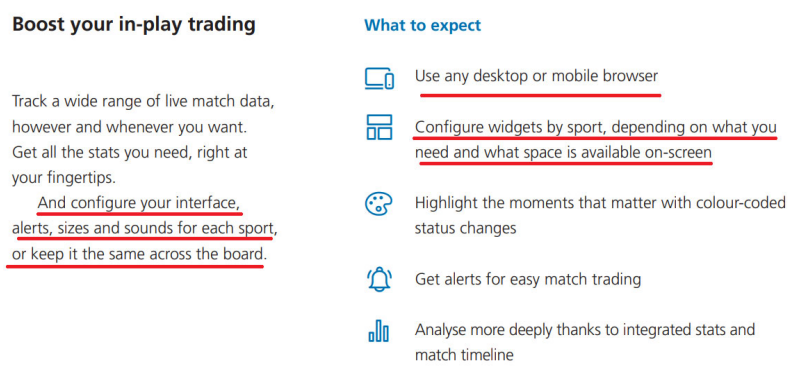
See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

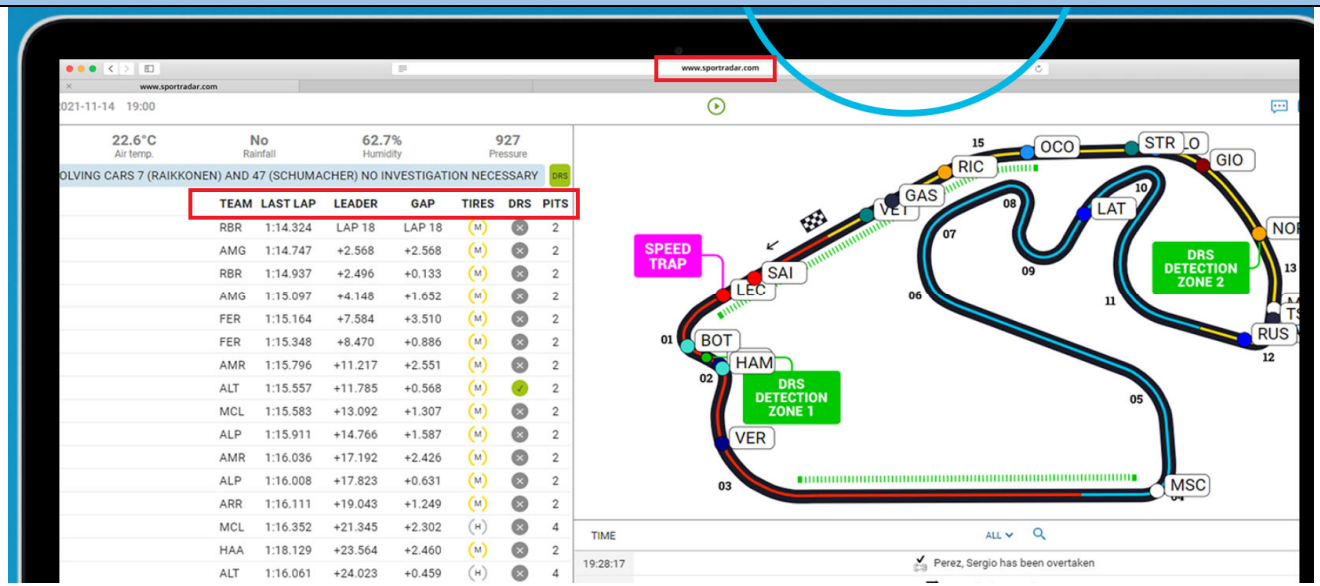
Underpinned by the largest network of data journalists in the world

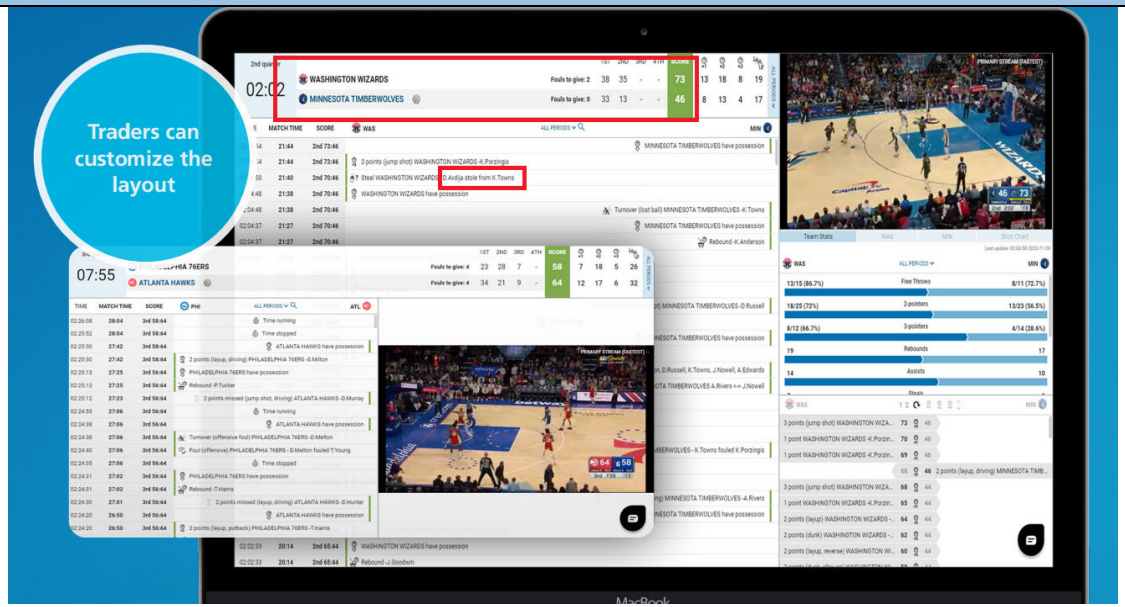
Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control.

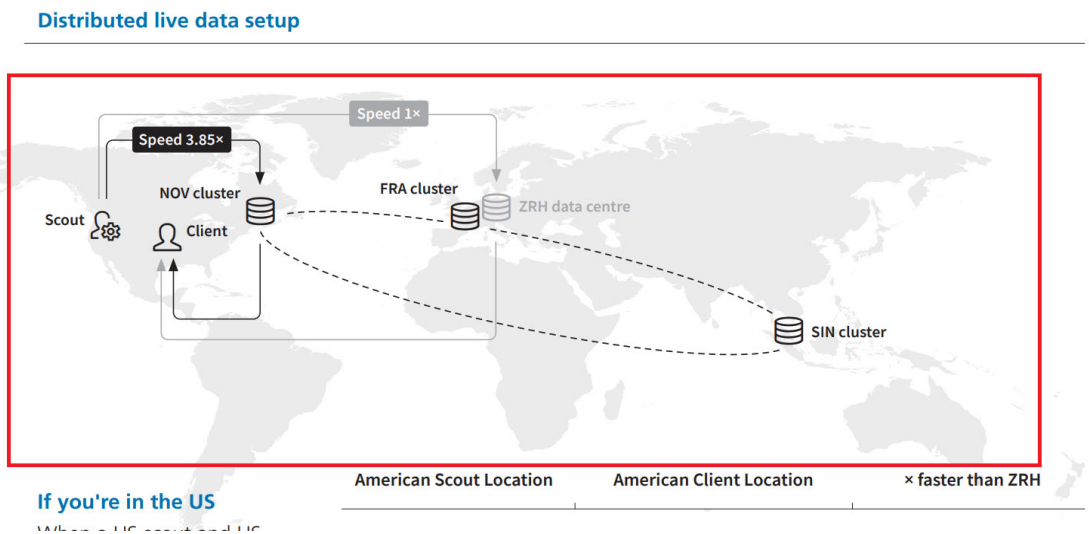
Key Features	Accused Product
	See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*

Key Features	Accused Product
	 *See,* PANDA-SR_000113 at PANDA-SR_000116, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* Live Channel Trading is integrated into the Live Data Client as a widget separate from other widgets that provide data on a match (e.g., scores, play-by-play, or statistics). Further, the other widgets can be interactive.

Key Features	Accused Product
	 *See,* PANDA-SR_000113 at PANDA-SR_000114, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*
transmit the at least some of the second event information to the first viewer client device of the second plurality of viewer client devices via a fourth Internet communication channel between at least one second event socket of the at least one socket server and the first viewer client device of the second plurality of viewer devices.	Sportradar Live Channel Trading includes "*at least one socket server communicatively coupled to the control server to … transmit the at least some of the second event information to the first viewer client device of the second plurality of viewer client devices via a fourth Internet communication channel between at least one second event socket of the at least one socket server and the first viewer client device of the second plurality of viewer devices.*" For example, Sportradar Live channel trading's live data intelligence provides game statistics and play-by-play action as well as real-time analysis of data streams from sporting events. Sportradar distributes live video from a vast array of rights holders to betting operators around the world. Customers receive this intelligence as data feeds that integrate into their applications or betting systems or as live video streams distributed over internet protocol (IP) networks. The intelligence, including Milestones, Leaderboards, Highs, Probabilities, team information (e.g., team names, abbreviations and/or logos), score information, etc., is different for different live stream events and a socket server, upon information and belief, receives the intelligence to be transmitted to respective customers.

Key Features	Accused Product
	 *See,* PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* **Underpinned by the largest network of data journalists in the world** Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control. *See,* PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

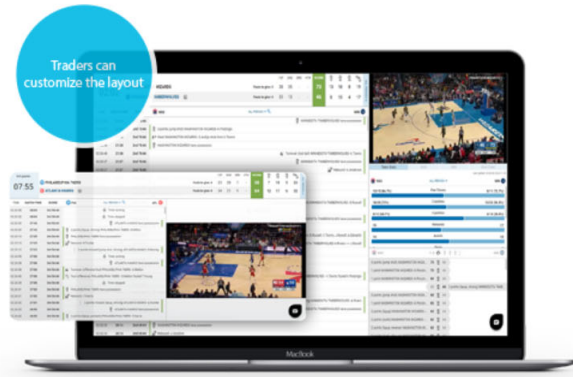
Key Features	Accused Product
	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*

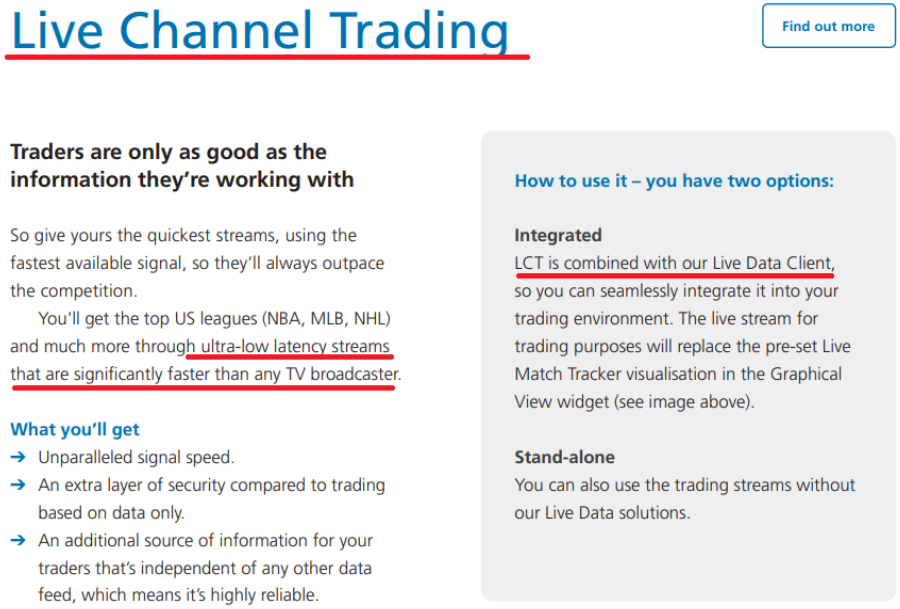
Key Features	Accused Product
	 *See,* PANDA-SR_000113 at PANDA-SR_000116, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf* Live Channel Trading is integrated into the Live Data Client as a widget separate from other widgets that provide data on a match (e.g., scores, play-by-play, or statistics). Further, the other widgets can be interactive.

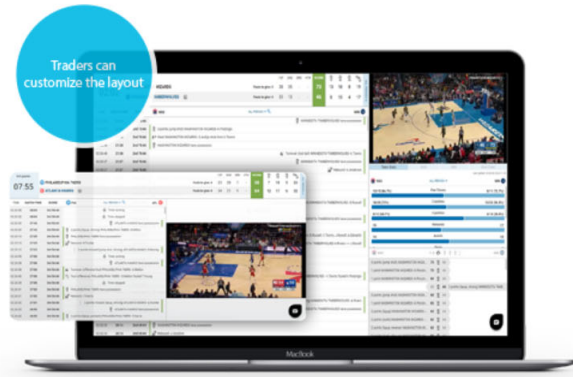
Key Features	Accused Product
	Boost your in-play trading Track a wide range of live match data, however and whenever you want. Get all the stats you need, right at your fingertips. And configure your interface, alerts, sizes and sounds for each sport, or keep it the same across the board. **What to expect** Use any desktop or mobile browser Configure widgets by sport, depending on what you need and what space is available on-screen Highlight the moments that matter with colour-coded status changes Get alerts for easy match trading Analyse more deeply thanks to integrated stats and match timeline *See,* PANDA-SR_000113 at PANDA-SR_000114, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

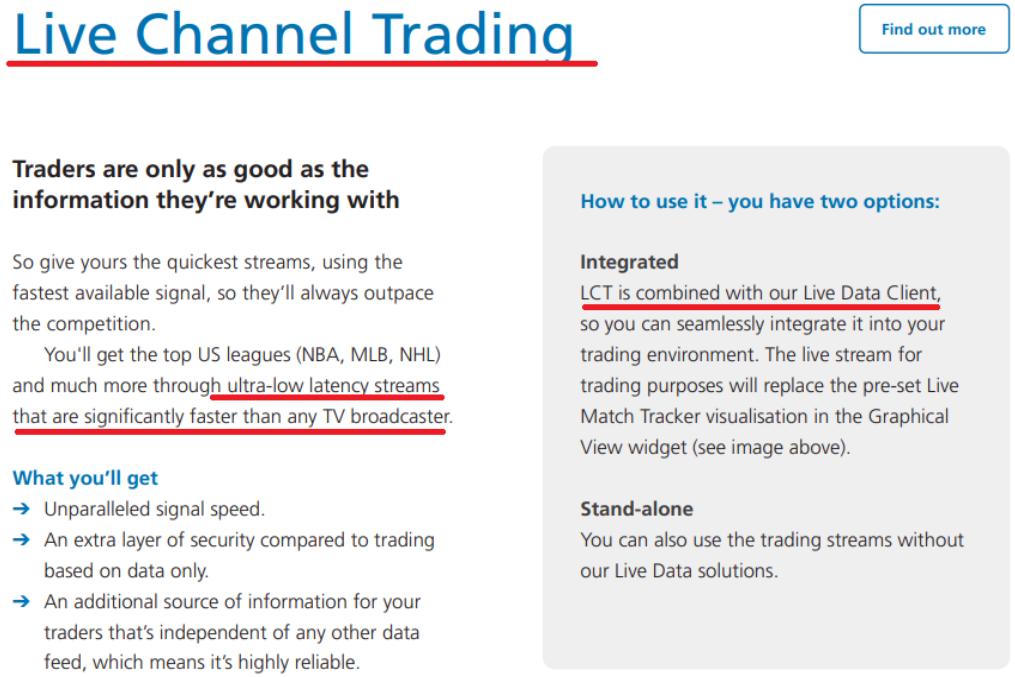
2. Dependent Claim 20

20. The system of claim 19, wherein: in A), the plurality of media sources: provide a second copy of the first plurality of copies to a second viewer client device of the first plurality of viewer client devices via a third video Internet communication channel between the plurality of media sources and the	Sportradar Live Channel Trading includes the system of claim 19, "*wherein: in A), the plurality of media sources: provide a second copy of the first plurality of copies to a second viewer client device of the first plurality of viewer client devices via a third video Internet communication channel between the plurality of media sources and the second viewer client device of the first plurality of viewer client devices.*" For example, the live streams in the Accused Product are transmitted to multiple client devices.

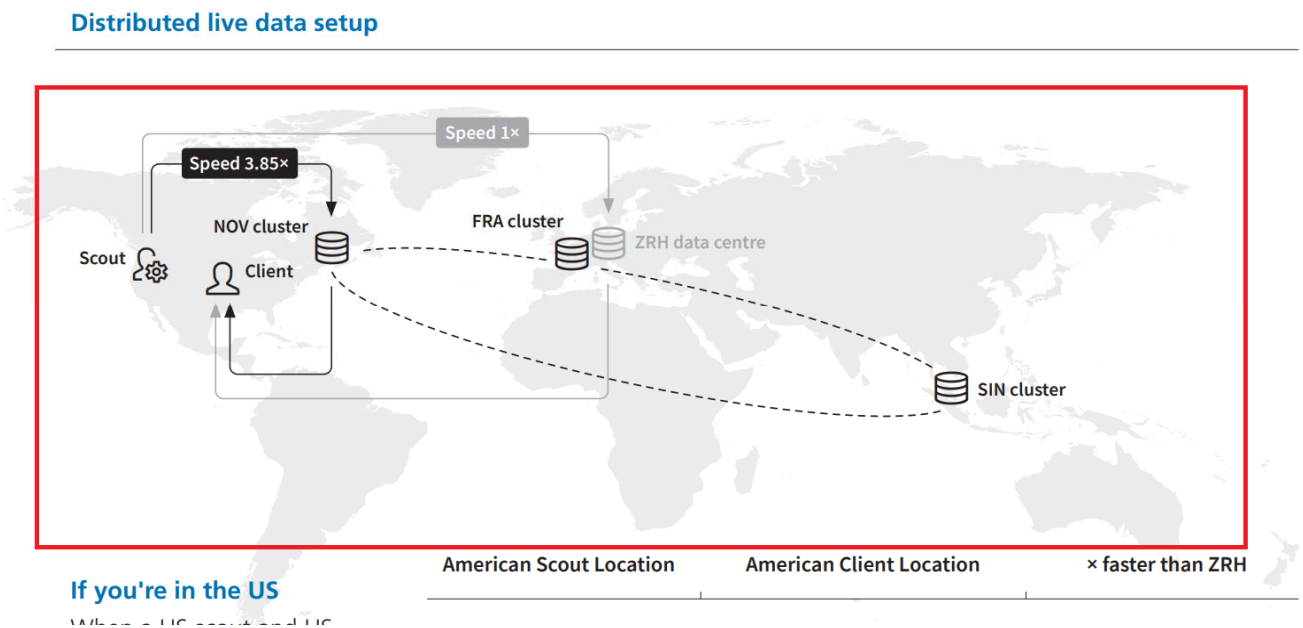
second viewer client device of the first plurality of viewer client devices; and	LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/* Betradar's AV Video Player – the solution to simplify your integration process Our fully hosted Betradar AV Video Player simplifies and accelerates the integration process for bookmakers and provides a low cost deployment and set-up procedure for your business. The software can be used as an embedded player next to your sports betting offer as well as a pop-up player. Furthermore, Betradar's AV Video Player can be accessed on mobile and tablet devices. Extend the AV Video Player with existing betting and content solutions to create an immersive, fast-paced betting experience that surrounds your streamed offering. *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*

	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
provide a second copy of the second plurality of copies to a second viewer client device of the second plurality of viewer client devices via a fourth video Internet communication channel between the plurality of media sources and the second viewer client device of the second	Sportradar Live Channel Trading includes the system of claim 19, "*wherein: in A), the plurality of media sources … provide a second copy of the second plurality of copies to a second viewer client device of the second plurality of viewer client devices via a fourth video Internet communication channel between the plurality of media sources and the second viewer client device of the second plurality of viewer client devices.*" For example, live streams in the Accused Product are transmitted to multiple client devices.

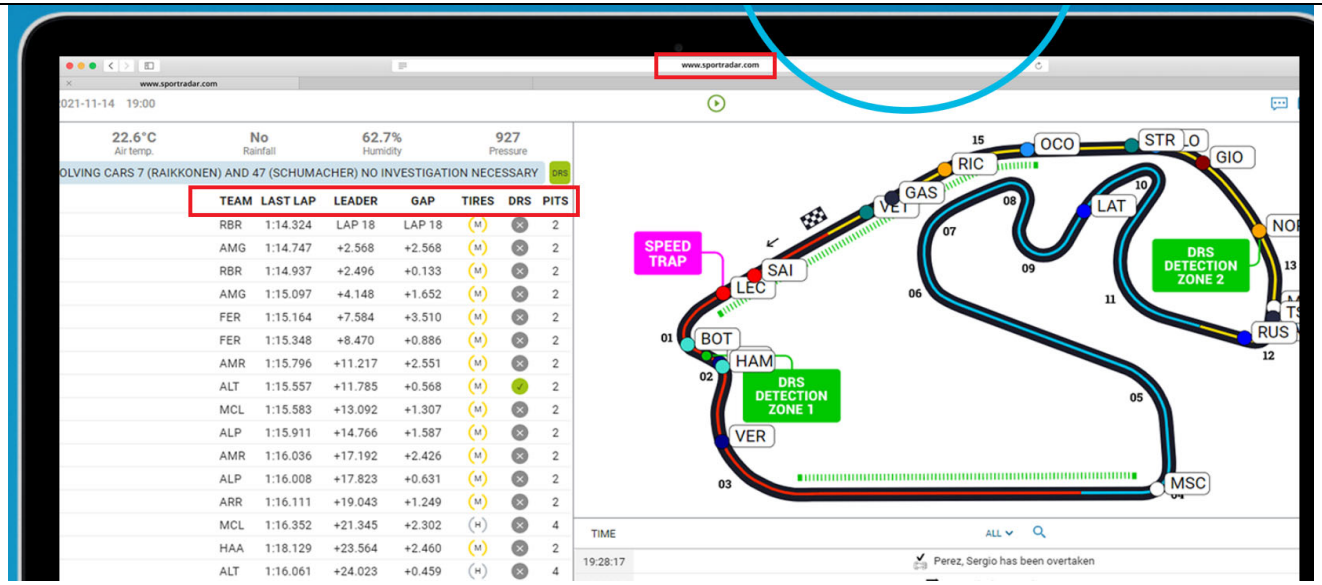
plurality of viewer client devices; and	LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest.  *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/* Betradar's AV Video Player – the solution to simplify your integration process Our fully hosted Betradar AV Video Player simplifies and accelerates the integration process for bookmakers and provides a low cost deployment and set-up procedure for your business. The software can be used as an embedded player next to your sports betting offer as well as a pop-up player. Furthermore, Betradar's AV Video Player can be accessed on mobile and tablet devices. Extend the AV Video Player with existing betting and content solutions to create an immersive, fast-paced betting experience that surrounds your streamed offering. *See,* PANDA-SR_000104 at PANDA-SR_000106, *https://www.betradar.com/live-streaming/live-channel-online/*

	 *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://betradar.com/wp-content/uploads/sites/4/2014/11/Betradar-Live-Streaming-Brochure.pdf*
in C), the at least one socket server: transmits at least the first event information to the second viewer client device of the first plurality of viewer client devices via a third event information Internet communication channel	Sportradar Live Channel Trading includes the system of claim 19, wherein "*in C), the at least one socket server … transmits at least the first event information to the second viewer client device of the first plurality of viewer client devices via a third event information Internet communication channel between the at least one first event socket of the at least one socket server and the second viewer client device of the first plurality of viewer devices.*" Sportradar Live channel trading's live data intelligence provide game statistics and play-by-play action as well as real-time analysis of data streams from sporting events. Sportradar distributes live video from a vast array of rights holders to betting operators around the world. Customers receive this intelligence

between the at least one first event socket of the at least one socket server and the second viewer client device of the first plurality of viewer devices; and	as data feeds that integrate into their applications or betting systems or as live video streams distributed over internet protocol (IP) networks. LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest. *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/*



See, PANDA-SR_000113 at PANDA-SR_000116, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

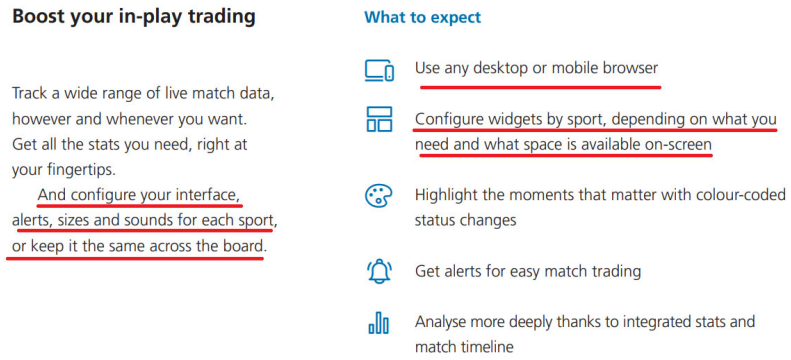


See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

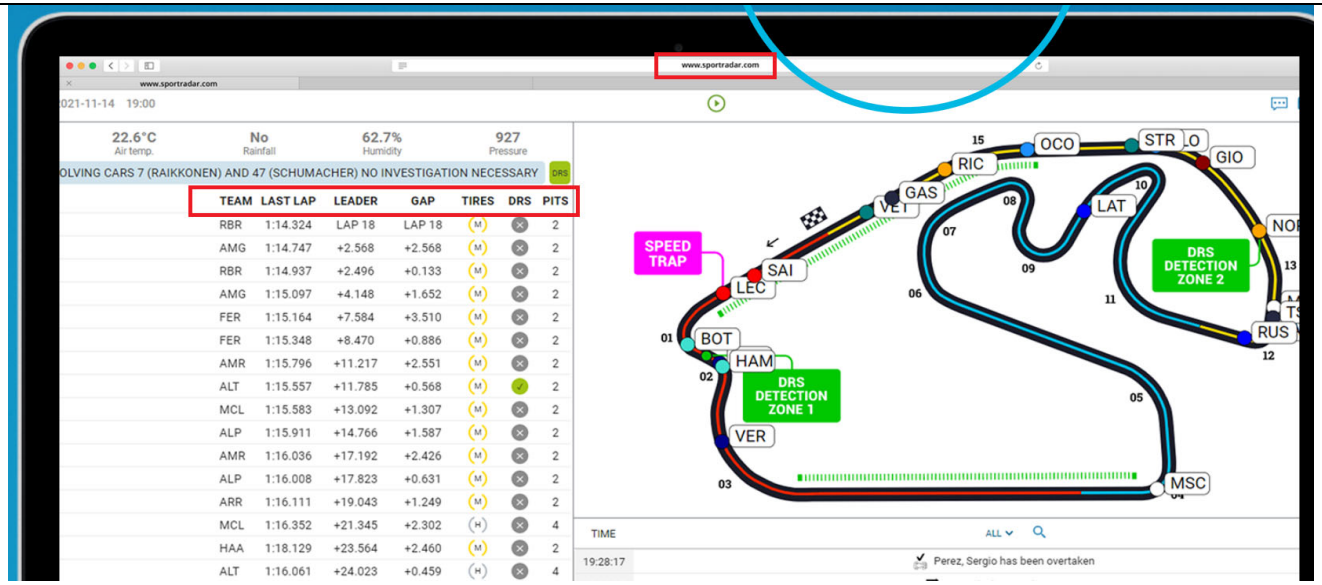
Underpinned by the largest network of data journalists in the world

Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control.

See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

	Live Channel Trading is integrated into the Live Data Client as a widget separate from other widgets that provide data on a match (i.e., scores, play-by-play, or statistics). Further, the other widgets can be interactive.  *See,* PANDA-SR_000113 at PANDA-SR_000114, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*
transmits at least the second event information to the second viewer client device of the second plurality of viewer client devices via a fourth event information Internet communication channel between the at least one second event socket of the at least one socket server and the second viewer client device of the second	Sportradar Live Channel Trading includes the system of claim 19, wherein "*in C), the at least one socket server … transmits at least the second event information to the second viewer client device of the second plurality of viewer client devices via a fourth event information Internet communication channel between the at least one second event socket of the at least one socket server and the second viewer client device of the second plurality of viewer devices*."

plurality of viewer devices.



See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

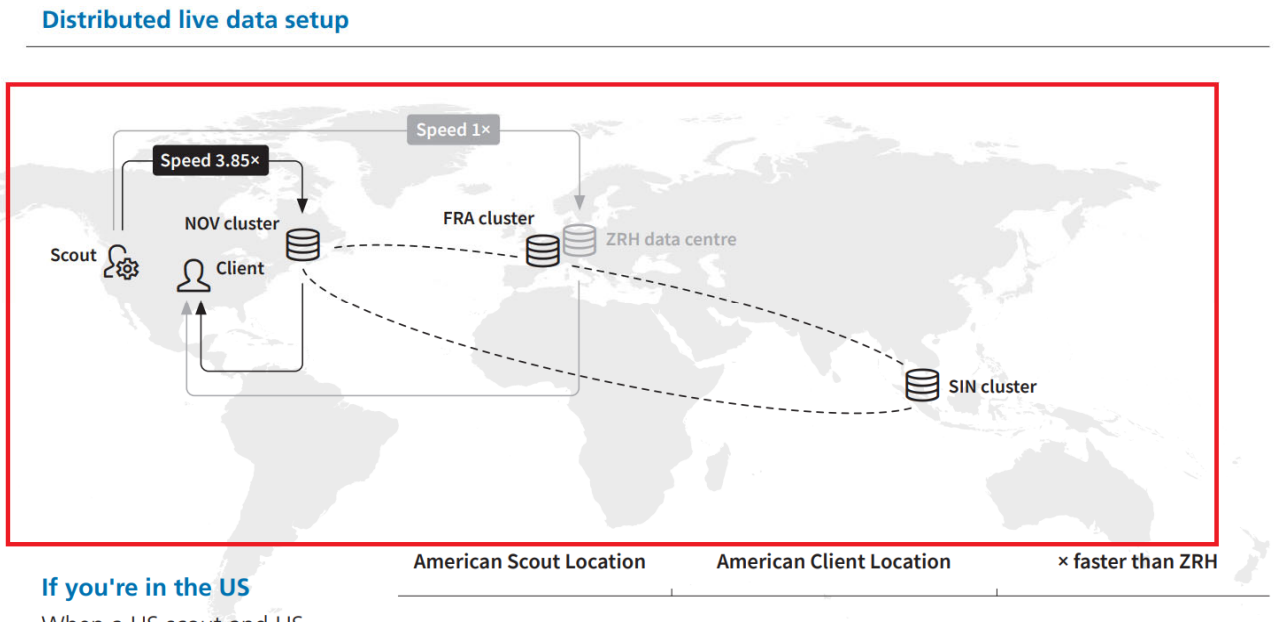
Underpinned by the largest network of data journalists in the world

Every game produces thousands of data points. To collect them, you need two things: a highly qualified data journalist, and ultra-reliable software. We have both: which is why we're constantly setting, and pushing, the standard when it comes to selection, training and quality control.

See, PANDA-SR_000113 at PANDA-SR_000115, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

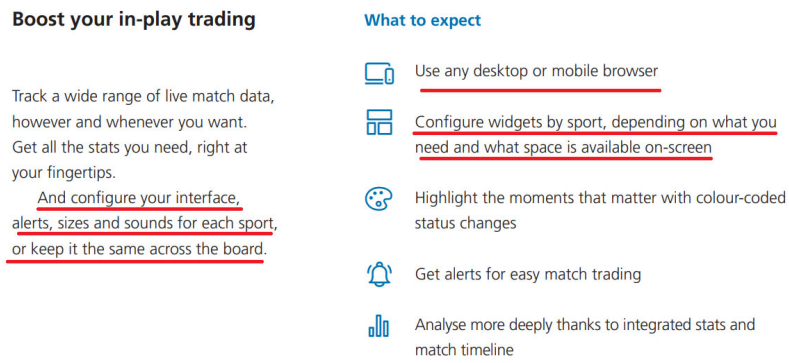
As shown, Sportradar Live channel trading's live data intelligence provides game statistics and play-by-play action as well as real-time analysis of data streams from sporting events. Sportradar distributes live

	video from a vast array of rights holders to betting operators around the world. Customers receive this intelligence as data feeds that integrate into their applications or betting systems or as live video streams distributed over internet protocol (IP) networks. LIVE CHANNEL TRADING Traders are only as good as the information they're working with So give yours the quickest streams, using the fastest available signal, so they'll always outpace the competition. You'll get the top US leagues (NBA, MLB, NHL) and much more through ultra-low latency streams. All matches in this offering are transmitted via our in-house developed Video Delivery Network (VDN), a renowned back-end live video streaming system that provides audiovisual game feeds up to eight seconds faster than any TV broadcaster. Use Live Channel Trading in combination with the Live Channel Online, or our data solutions, and benefit to the fullest. *See,* PANDA-SR_000029 at PANDA-SR_000034, *https://www.betradar.com/live-streaming/live-channel-trading/*



See, PANDA-SR_000113 at PANDA-SR_000116, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*

Live Channel Trading is integrated into the Live Data Client as a widget separate from other widgets that provide data on a match (i.e., scores, play-by-play, or statistics). Further, the other widgets can be interactive.

	 *See,* PANDA-SR_000113 at PANDA-SR_000114, *https://www.betradar.com/wp-content/uploads/sites/4/2022/11/Live-Data-Brochure-2022.pdf*