U.S. PATENT NO. 11,039,218 V/S Genius Sports Ltd.

I. INTRODUCTION

The chart below demonstrates how Defendant Genius Sports Ltd. ("Defendant" or "Genius Sports") 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 1 and 4 of U.S. Patent No. 11,039,218 ("the '218 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 Genius Sports Platform and other offerings and services that integrate with Defendant's Genius Sports Platform (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 1 and 4 of the '218 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 1 and 4 of the '218 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 1 and 4 of the '218 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 the Genius Sports Platform in a manner that infringes claims 1 and 4 of the '218 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 1 and 4 of the '218

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_000055-PANDA_000064, https://www.geniussports.com/sportsbook/streaming/.) 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 '218 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 '218 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 '218 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

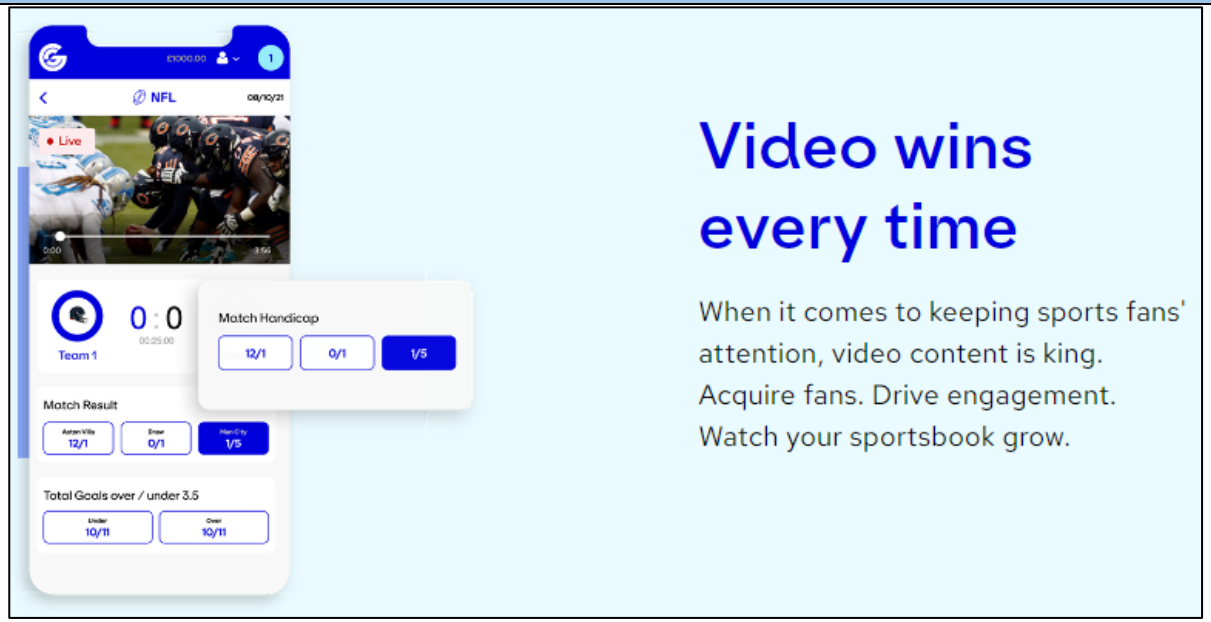
because such architecture is integral to the system as recited in the claims of the ’218 Patent. None of these products are staple goods—they are sophisticated and customized video streaming products, methods, and systems.

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.

II. CLAIM CHARTS

1. Independent Claim 1

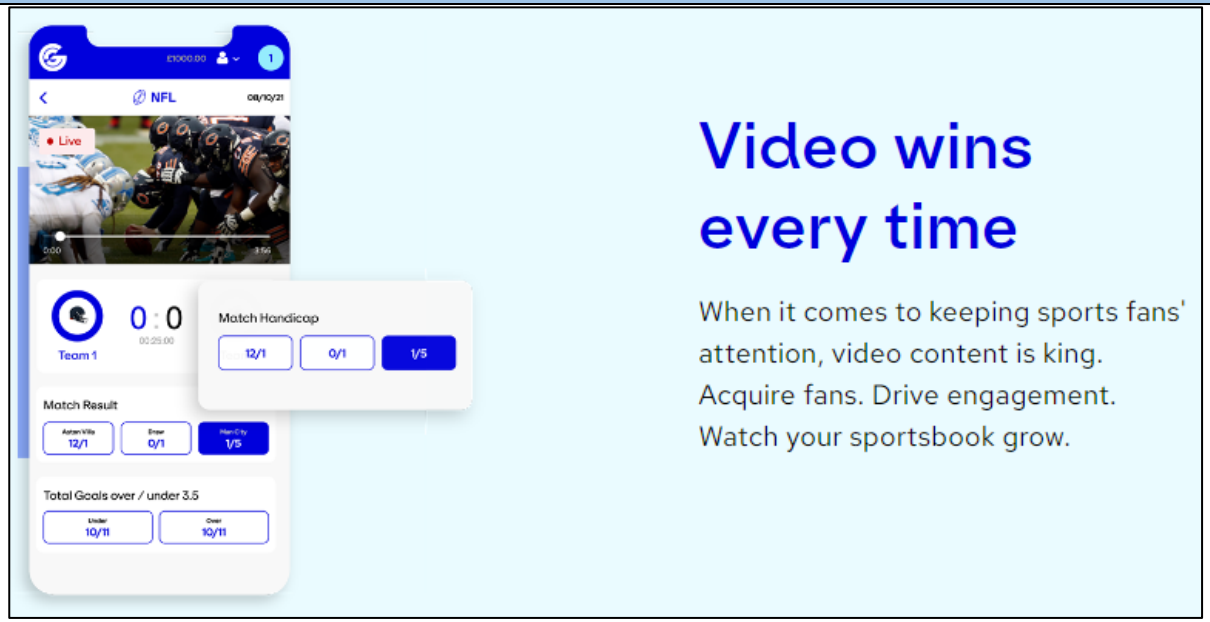
Key Features	Accused Product
[1.P] A system for controlling a plurality of viewer client devices to receive first digital content relating to a first sporting event and first event information germane to the first sporting event, the first event information including online gaming information, the system comprising:	Genius Sports’ streaming product includes “a *system for controlling a plurality of viewer client devices to receive first digital content relating to a first sporting event and first event information germane to the first sporting event, the first event information including online gaming information.*” For example, the Genius Sports live streaming services can be accessed through web browsers where a video player in be integrated into the website using API to transmit the video stream related to a match wherein the score and match details are updated live on the multibet widgets on a user device. In addition, Genius Sports’ streaming product includes both a live stream of a sporting event and overlayed event information germane to the sporting event.

Key Features	Accused Product
	 (*See* PANDA_000055 at PANDA_000057, https://www.geniussports.com/sportsbook/streaming/.) The overlayed event information includes, e.g., 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 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.).
[1A] a control server to periodically retrieve, via the Internet, the first event information germane to the first sporting event;	On information and belief, Genius Sports' streaming product includes "*a control server to periodically retrieve, via the Internet, the first event information germane to the first sporting event;*

Key Features	Accused Product
	For example, Genius Sports' streaming product provides fixture information, such as "Sport, Start (local time of user), Competition, Fixture, FixtureId, Coverage, Lineups, and Assigned," as well as "Statistics." Schedule This is where you select the booked fixtures for viewing. For each fixture, you will see the following information: • **Sport** - the sport of the fixture • **Start (local time of user)** - the start time of the match, in *your* time zone (based on your device's current time). • **Competition** - the league or tournament to which this match belongs. • **Fixture** - the teams or competitors in this match. • **FixtureId** - unique id per fixture per sport • **Coverage** - indicates whether the event is covered from the Venue or TV • **Lineups** - indicates whether the event has lineup information or not • **Assigned** - check this box to add this fixture to your **Live** tab. The **All Fixtures** tab displays all available fixtures in your selected date range. The **Scheduled Fixtures** tab displays only fixtures that you have selected. By default, the Schedule displays fixtures with start times from -3 hours to +12 hours from the current time. Use the **Filter** button to expand your selection of fixtures, and to filter by coverage type and lineups availability ⚠ Not all fixtures from the selected Date Range are loaded at once. The user can see the first batch of fixtures and scrolling down will automatically load more fixtures. (*See,* PANDA_000196 at PANDA_000198, https://geniussports.atlassian.net/wiki/spaces/BID/pages/1511621214/Live+Viewer+-+User+Manual.)

Key Features	Accused Product
	Statistics Statistics show the number of events of each type in this match, per side. Clicking the opens Time Based Statistics filter menu. User can apply only one of the filters from the list, which updates the statistics based on the selected filter. Text with the selected filter is shown in the top right corner of the component • Last 5 mins • Last 10 mins • Last 15 mins • Between 0 - 15 mins • Between 15 - 30 mins • Between 30 - 45 mins • Between 45 - 60 mins • Between 60 - 7 5mins • Between 75- 90 mins • First Half • Second Half • Since last Goal • Since last Red Card • Extra-tme (*See,* PANDA_000196 at PANDA_000200-PANDA_000201, https://geniussports.atlassian.net/wiki/spaces/BID/pages/1511621214/Live+Viewer+-+User+Manual.) Genius Sports' streaming product combines live sports data and live sports video. As stated below, Genius Sports' streaming product pairs "video, captured direct from pitch or courtside … with official data and live betting services…":

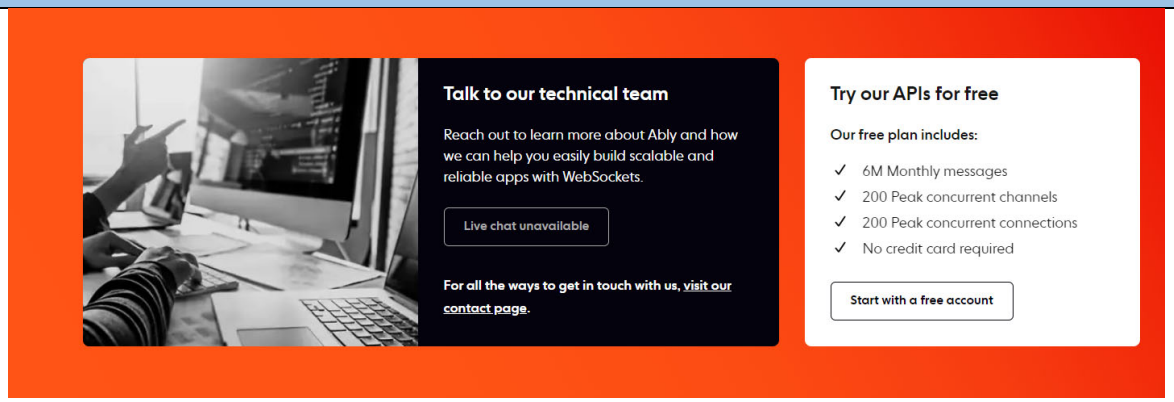
Key Features	Accused Product
	New content is complemented by complete official data offering and will plug crucial gaps in in-play betting schedules – bet365 among the first to go live with the product. Betgenius, a leading supplier of data and trading services to sportsbooks, has launched a live streaming service giving operators access to new content from sport competitions around the world. Derived from partnerships with official rights holder across multiple sports, the service features thousands of low latency streams including content which has never before been available to sportsbooks. By focusing on fixtures played at off-peak times, the service allows operators to offer a more engaging experience right around the clock, enhancing bet placement and customer retention during quiet scheduling periods. All video, captured direct from pitch or courtside, is paired with official data and live betting services, and features easy-access API integration. International operator bet365 is among the first sportsbooks to go live with the product, with more to be announced in the coming weeks. Jack Davison, Chief Commercial Officer at Genius Sports Group, said: "Our close relationships with sports rights holders across the world have given us access to new, high quality streaming content which will significantly enhance our sportsbook partners' in-play products. "Combined with fast, accurate data on thousands of fixtures, this is a new and cost-effective way to attract more customers with a complete and immersive live betting experience." (*See,* PANDA_000015-PANDA_000016, https://investors.geniussports.com/news/news-details/2019/Betgenius-launches-live-streaming-service-for-sportsbooks/default.aspx.)

Key Features	Accused Product
	 (*See* PANDA_000055 at PANDA_000057, https://www.geniussports.com/sportsbook/streaming/.)
[1B] at least one socket server communicatively coupled to the control server to: [1B.1] receive from the control server at least the first event information; and	On information and belief, Genius Sports' streaming product includes "*at least one socket server communicatively coupled to the control server to: receive from the control server at least the first event information.*" For example, Genius Sports' streaming product sends "a stream of messages over a long running socket" to accomplish the "API call to send real time data to the Warehouse/Statistics Engine."

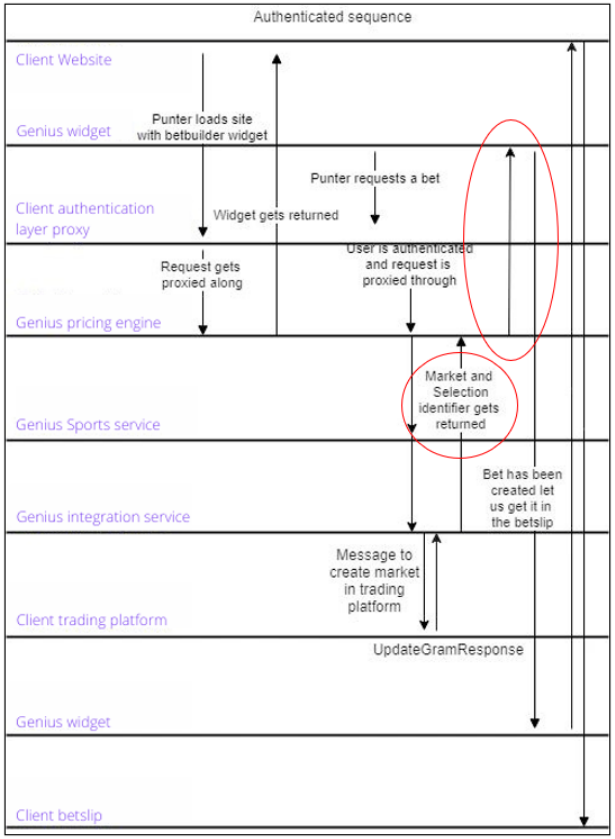
Key Features	Accused Product

	Introduction
	This API call is to send real time data to the Warehouse/Statistics Engine. It is accomplished by sending a stream of messages over a long running socket. Pending network problems the connection should remain open for the length of the match.
	
	Connection
	There are two different ways to establish a publish connection to the system a HTTP method or a RAW method. These two different ways exists to enable the client to potentially work around any port or proxy problems present at in venue areas. Connections can also be sent over one of two different ports, 80 or 5522
	
	The same data, parameters and format is used in both methods, only the startup of the connection differs.
	
	RAW
	In the RAW method, a socket is opened to the streaming API endpoint and the request string is sent, followed by two carriage returns (`\n\n`) or two carriage return line feeds (`\r\n\r\n`). To initiate RAW mode the nohttp parameter must be present and set in the request string.
	
	`/v2/{sport}/publish`
	
	Example - HTTP
	`POST /v2/basketball/publish?streamKey=TESTSTREAMKEY&timestamp=1412987153 HTTP/1.1`
	`Host: localhost:8000`
	`Connection: keep-alive`
	
	Example - RAW
	`/v2/basketball/publish?nohttp=1&streamKey=TESTSTREAMKEY&timestamp=1412987153`
	
	(*See,* PANDA_000139-PANDA_000141, https://developer.geniussports.com/warehouse/livestream/publish/index_football.html.)
	
	In addition, Genius Sports "relies on Ably to handle live sports and betting data delivery across 80 apps – each dedicated to a different sport" and Ably "can help [customers] easily build scalable and reliable apps with WebSockets."

Key Features	Accused Product
	Infrastructure teams can "sleep easy" and developers are free to innovate Genius Sports now relies on Ably to handle live sports and betting data delivery across 80 apps – each dedicated to a different sport. Concerns about latency are gone - with 300+ points of presence across a global edge network, Ably effortlessly maintains sub-65ms latency at global scale. That ensures live data delivery to Genius Sports' customers is always 3-4 seconds ahead of video, which protects the integrity of in-play betting and customer revenues. Meanwhile, Gary and his team can "sleep easier at night", knowing that business critical data is no longer at the mercy of complex and increasingly unstable on-premises infrastructure; the daily rush to address hardware issues is a thing of the past. In turn, that has eliminated annual hardware costs and freed up around 30 hours per month in RabbitMQ maintenance that Genius Sports' developers and engineers can now refocus on service optimisation and innovation.

Key Features	Accused Product
	 (*See* https://ably.com/case-studies/genius-sports)
[1B.2] transmit at least some of the first event information, including the online gaming information, to at least a first viewer client device of the plurality of viewer client devices via a first event information Internet communication channel between a first event socket of the at least one socket server and the first viewer client device,	On information and belief, Genius Sports' streaming product includes at least one socket server communicatively coupled to the control server to "transmit at least some of *the first event information, including the online gaming information, to at least a first viewer client device of the plurality of viewer client devices via a first event information Internet communication channel between a first event socket of the at least one socket server and the first viewer client device.*" Genius Sports offers a Multibet widget, which can be integrated into the front-end of the sportsbook's platform. An end user using the sportsbook's platform can request a bet via the widget and the widget can thereafter retrieve the data needed to populate the end user's betslip. This data includes, for example, the bet generated by the sportsbook's trading platform, which is transmitted by Genius Sports back-end (e.g., their Pricing Engine) to the Multibet widget. Although the bets are generated dynamically by the sportsbook's platform, the bets are always stored by Genius Sports for re-use.

Key Features	Accused Product
	In this document, you'll find a brief description of the new Multibet widget front-end structure. The multibet widget product is designed to allow bettors to place several bets related to a fixture in pre-match or in-play. Initially, American football and football (soccer) are supported, although the widget is intended to be sport agnostic, small tasks are required to support new sports. It is intended for bookmakers to implement on their websites offering their users a range of configurable markets per event according to their needs. The Widget allows different customizations such as colors and fonts, which will allow our customers to use their brand properties offering their end users a seamless experience on their site. (*See,* PANDA_000065, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4136337521/Multibet+Front-End+Integration.) Please note that latest platform response for each unique Multibet market will be stored on Genius Sports' system in order to be re-used for subsequent bets. (*See,* PANDA_000533 at PANDA_000535, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4283664043/Multibet+Sportsbook+Integration+V3#Sportsbook-Trading-Platform-Response-to-Multibet-Market-Messages.) In addition, as shown below Genius Sports transmits at least the bet generated by the sportsbook's trading platform to the Genius widget on client's device via the Internet.

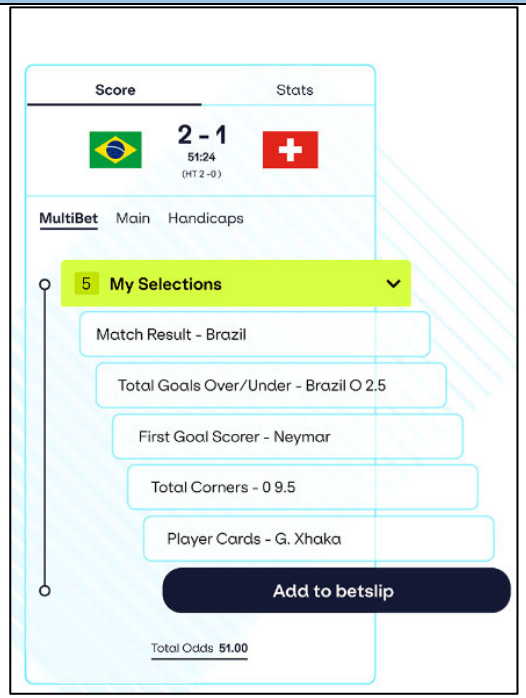
Key Features	Accused Product
	 (*See,* PANDA_000001, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4284776797/Authenticating+User-Session+Using+a+Proxy+Service.) Communication between the Multibet widget and Genius Sport's back-end is accomplished using Genius Sport's SmartStream integration. SmartStream products are embedded within a webpage via an iframe.

Key Features	Accused Product
	Multibet Widget Integration Our customers should embed the Multibet Widget through an iframe. When a player made his choice and requests a bet, the Multibet Widget will make a call to the customer's bet slip with all the required data to populate it with the selection details. The technical information for the front-end integration can be found in the following space - SmartStream Integrations. Customers that have already integrated with other Fan Engagement products such as betting widgets, Game Trackers, and Scoreboards can re-use the existing iframe implementation for the Multibet Widget. (*See,* PANDA_000065, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4136337521/Multibet+Front-End+Integration.) This page describes how to integrate with the variety of SmartStream products with examples. All SmartStream products are hosted by Genius Sports and designed to be embedded within a client hosted webpage via an iframe. (*See,* PANDA_000077, https://geniussports.atlassian.net/wiki/spaces/BID/pages/56529015/SmartStream+Integrations.)

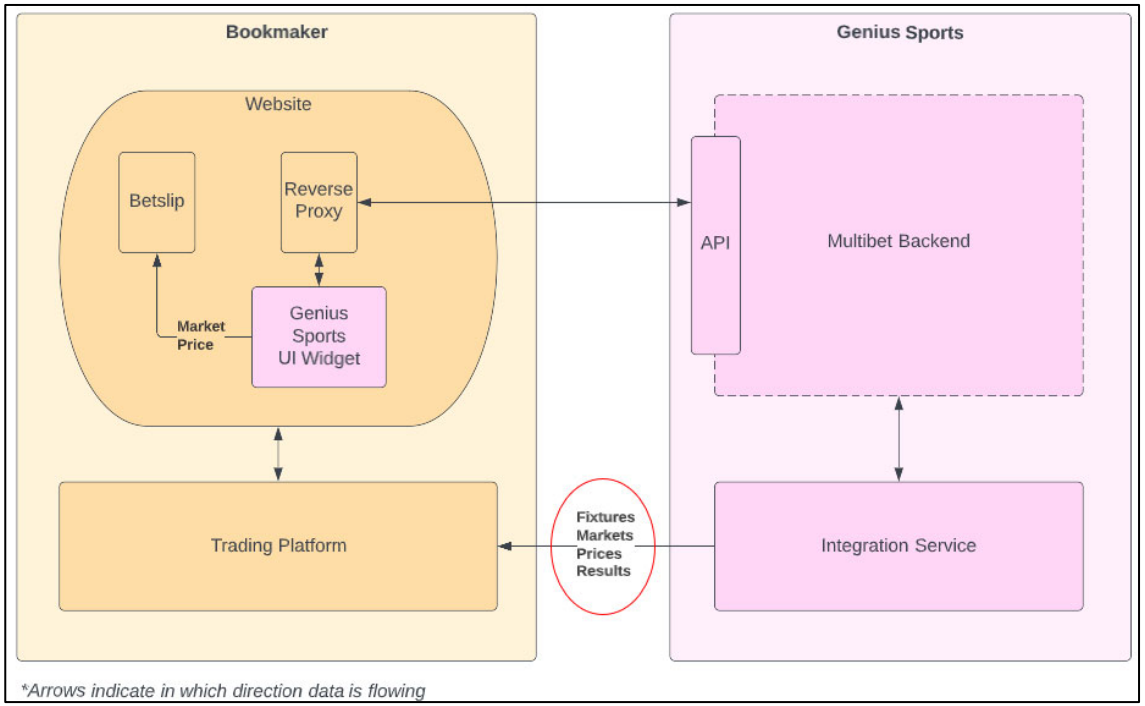
Key Features	Accused Product

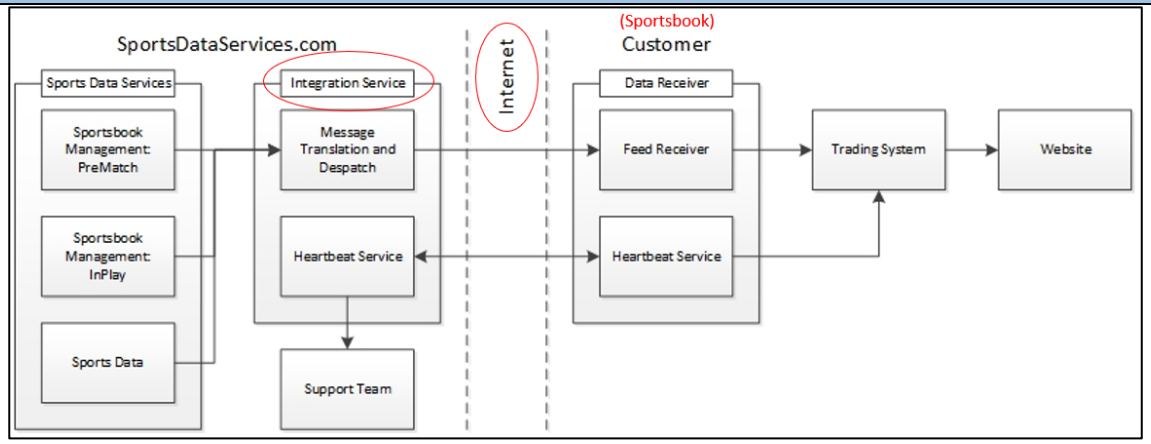
	SmartStream Release Process
	
	SmartStream is released to it's user acceptance testing (UAT) environment every two weeks with new features and bug fixes. Release notes will be published at the start of each cycle detailing what features and fixes are to be included in the release.
	
	After two weeks have passed with no critical issues, the version will be pushed to Production where it will be visible on your live site. It is at your discretion that you keep track of these release notes to ensure you are still successfully integrating and that you are satisfied with the new and upcoming version of SmartStream.
	
	A separate UAT SmartStream URL will be included as part of your integration details for you to use. It is highly recommended that you maintain a replica environment of your own site with the UAT version of SmartStream integrated to enable you to review up-and-coming features and fixes before they reach Production.
	
	Development → Two weeks → UAT → Two weeks → Production
	
	Embedding a product
	
	To display the HTML SmartStream product on your page you will first need to add the following scripts into the body of the page, preferably at the bottom to ensure that the SmartStream application is loaded after the elements of the page itself. The demo URLs should be replaced with your customer specific URLs, which will be provided by Genius Sports once a client specific version of the application has been generated.
	
	`<script src="https://bsdemo.betstream.betgenius.com/betstrear`
	`<script>`
	`var iframeApi = new IFrameApi("betgenius-iframe");`
	`</script>`
	
	The iframe code below should be placed within the body of the webpage where you would like the HTML SmartStream product application to appear. The script below is an example that embeds a Football Scorecentre product and should be replaced with the location of your client specific product which will be provided by Genius Sports. The id of the iframe should match the parameter passed in the JavaScript object above.
	
	`<iframe scrolling="no" id="betgenius-iframe" src="https://bs(`

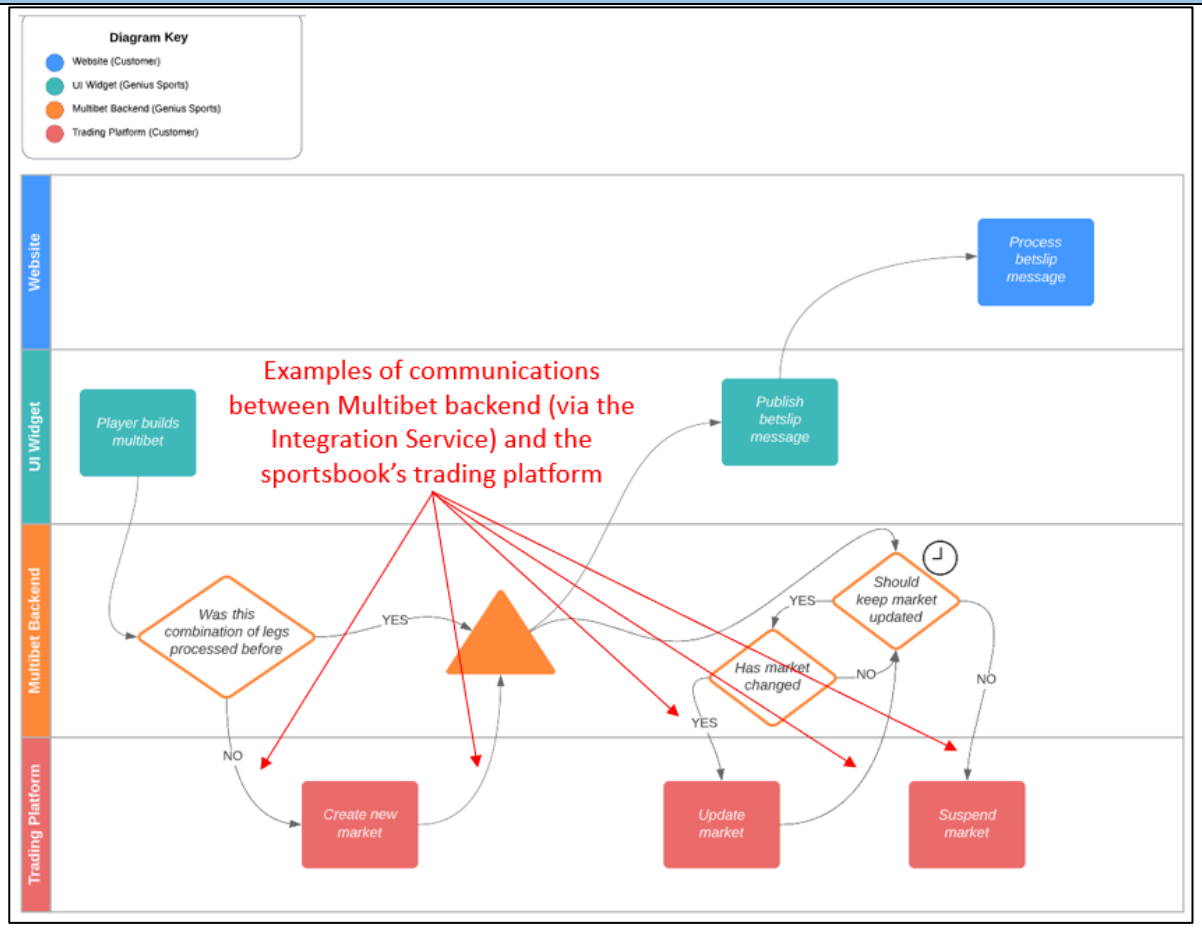
	(*See*, PANDA_000077-PANDA_000078, https://geniussports.atlassian.net/wiki/spaces/BID/pages/56529015/SmartStream+Integrations.) Genius Sports offers several data-related product offerings to provide sportsbooks various data streams (betting data, sports data). In one example, Genius Sports' streaming product uses Multibet, which allows end users (e.g., bettors) to place same-game parlays during a sports match. Multibet is specifically offered to sportsbooks for integration into their trading platform. As shown in the screenshots below, Genius Sports transmits the soccer game score, total goals over/under, total corners, first goal scorer, player cards, etc.

Key Features	Accused Product
	More in-play profits In-Play MultiBet is a high-margin live betbuilder product, where revenues mount as users add selections to their betslips. Players create the exact accumulator they want, during a single game, for example - *Ronaldo to score, Portugal to win, Over 5.5 Corners, Penalty awarded to Portugal.*  (*See,* PANDA_000111 at PANDA_000112-PANDA_000113, https://geniussports.com/sportsbook/betting-data-odds/in-play-multibet/.)

Key Features	Accused Product
	• Genius Sports to provide sportsbooks with automated, AI-powered live odds enabling bettors to place same-game parlays during live play or game intervals • The new product will be available for the FIFA World Cup, NFL, English Premier League and thousands of other official Genius events Genius Sports Limited ("Genius Sports"), the official data, technology and broadcast partner that powers the ecosystem connecting sports, betting and media, has launched *In-Play MultiBet*, providing sportsbooks with a powerful new tool to engage players and grow revenues in time for the FIFA World Cup 2022 and ongoing NFL season. Same-game parlay bets, which enable bettors to wager on multiple events occurring within the same game, have become an essential part of every major sportsbook's offering, giving customer's greater control over their bets and enhanced margins for the operators themselves. Now, through *In-Play MultiBet*, these bespoke bets can be placed once the game has begun, enabling players to place bets after every goal, touchdown and during intervals. Launched in time to give sportsbooks a new dimension at the FIFA World Cup, *In-Play MultiBet* is powered by the highest quality AI-powered live odds, tried and tested on Genius Sports' leading LiveTrading service. *InPlay MultiBet* will also be available across the NFL, English Premier League, Liga MX, and dozens of FIBA basketball and FIVB volleyball leagues worldwide. "Combining same game parlays with the unstoppable growth of in-play betting is a breakthrough innovation for us and our partners," said **Jack Davison, Chief Commercial Officer of Genius Sports**. "Starting with the biggest sports event of the year, the FIFA World Cup, *InPlay MultiBet* will enable our partners to unlock bigger margins and drive engagement between key match events and breaks." (*See,* PANDA_000179-PANDA_000180, https://www.geniussports.com/newsroom/genius-sports-launches-in-play-multibet-for-the-next-generation-of-same-game-parlay-bets/.) Genius Sports offers several options to sportsbooks to integrate MultiBet into their trading platform. In one example, Genius Sports provides a Multibet API, Sportsbook Integration (V3), and a UI widget to facilitate both front-end and back-end integration.

Key Features	Accused Product
	During operation, Genius Sport's Integration Service (provided by Sportsbook Integration (V3)) transmits various data (fixtures, markets, prices, results) to the sportsbook's trading platform via an Internet connection. Additionally, the Integration Service transmits a message to create a market (bet) in the sportsbook's trading platform. In return, the generated bet is transmitted from the trading platform to the Integration Service. In this manner, the sportsbook and Genius Sports services retrieve information germane to the first live sporting event via the Internet.  (*See,* PANDA_00212 at PANDA_00213, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4283664027/Multibet+Back-End+Integration.)

Key Features	Accused Product
	 (*See,* PANDA_000539, https://geniussports.atlassian.net/wiki/spaces/BID/pages/34822492/Integration+Schema.)

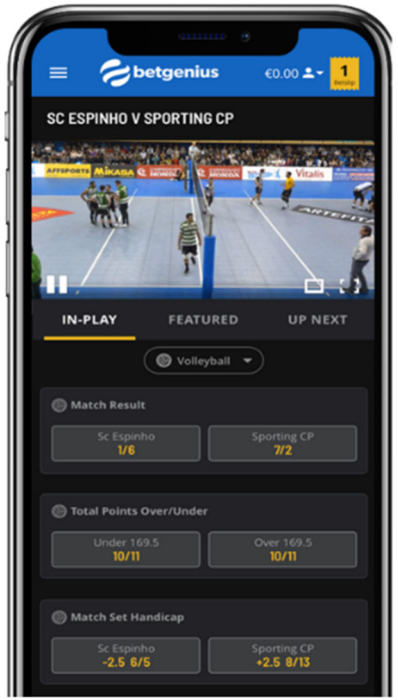
Key Features	Accused Product
	 (*See,* PANDA_00209 at PANDA_00210, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4284187362/Market+Lifetime.)

Key Features	Accused Product
[1B.3] wherein the first event socket corresponds to the first event information germane to the first sporting event; and	The Genius Sports' streaming product includes a system where "*the first event socket corresponds to the first event information germane to the first sporting event*." The Multibet widget, when embedded into the Genius Sports' streaming product, is configured for a specific sports match or fixture. The connection between the widget and Genius Sport's back-end is configured to transmit data related to the sports match. Embedding a Multibet Widget How do I embed a Multibet widget under a specific fixture? The Multibet Widget offered by Genius Sports is fixture specific and does not accommodate an event viewer and selector page, therefore it should be embedded under a specific fixture within the Sportsbook page. Using an URL parameter ***fixtureId*** which is expecting Genius Sports Fixture Id as a value: https://gsm-widgets.betstream.betgenius.com/multibet?fixtureId=6102728&productName=[clientName]&competitionId=296&culture=es-ES Other parameters will be required like: • **Product Name:** this is the customer name given by Genius. • **Competition id:** is the Genius Sports identifier for a competition. • **Culture:** is the parameter related to the language preferred. `<iframe src="https://gsm-widgets.betstream.betgenius.com/mul` (*See,* PANDA_000065, https://geniussports.atlassian.net/wiki/spaces/BID/pages/4136337521/Multibet+Front-End+Integration.)

Key Features	Accused Product

	Introduction
	This API call is to send real time data to the Warehouse/Statistics Engine. It is accomplished by sending a stream of messages over a long running socket. Pending network problems the connection should remain open for the length of the match.
	
	Connection
	There are two different ways to establish a publish connection to the system a HTTP method or a RAW method. These two different ways exists to enable the client to potentially work around any port or proxy problems present at in venue areas. Connections can also be sent over one of two different ports, 80 or 5522
	The same data, parameters and format is used in both methods, only the startup of the connection differs.
	
	RAW
	In the RAW method, a socket is opened to the streaming API endpoint and the request string is sent, followed by two carriage returns (`\n\n`) or two carriage return line feeds (`\r\n\r\n`). To initiate RAW mode the nohttp parameter must be present and set in the request string.
	`/v2/{sport}/publish`
	
	Example - HTTP
	`POST /v2/basketball/publish?streamKey=TESTSTREAMKEY&timestamp=1412987153 HTTP/1.1`
	`Host: localhost:8000`
	`Connection: keep-alive`
	
	Example - RAW
	`/v2/basketball/publish?nohttp=1&streamKey=TESTSTREAMKEY&timestamp=1412987153`
	
	(*See,* PANDA_000139-PANDA_000141, https://developer.geniussports.com/warehouse/livestream/publish/index_football.html.)

[1C] at least one webserver communicatively coupled to the at least one socket	Genius Sports' streaming product includes "*at least one webserver communicatively coupled to the at least one socket server to transmit, to the first viewer client device*."

Key Features	Accused Product
server to transmit, to the first viewer client device:	For example, Genius Sports' streaming product runs on device browser wherein the player embedded in the website authenticates the user and then sends a request to the webserver to further transmit the request to the genius sport's servers.  (*See,* PANDA_000015, https://investors.geniussports.com/news/news-details/2019/Betgenius-launches-live-streaming-service-for-sportsbooks/default.aspx.) Genius Sports' streaming product combines live sports data and live sports video. As stated below, Genius Sports' streaming product pairs "video, captured direct from pitch or courtside … with official data and live betting services…":

Key Features	Accused Product
	New content is complemented by complete official data offering and will plug crucial gaps in in-play betting schedules – bet365 among the first to go live with the product. Betgenius, a leading supplier of data and trading services to sportsbooks, has launched a live streaming service giving operators access to new content from sport competitions around the world. Derived from partnerships with official rights holder across multiple sports, the service features thousands of low latency streams including content which has never before been available to sportsbooks. By focusing on fixtures played at off-peak times, the service allows operators to offer a more engaging experience right around the clock, enhancing bet placement and customer retention during quiet scheduling periods. All video, captured direct from pitch or courtside, is paired with official data and live betting services, and features easy-access API integration. International operator bet365 is among the first sportsbooks to go live with the product, with more to be announced in the coming weeks. Jack Davison, Chief Commercial Officer at Genius Sports Group, said: "Our close relationships with sports rights holders across the world have given us access to new, high quality streaming content which will significantly enhance our sportsbook partners' in-play products. "Combined with fast, accurate data on thousands of fixtures, this is a new and cost-effective way to attract more customers with a complete and immersive live betting experience." (*See,* PANDA_000015-PANDA_000016, https://investors.geniussports.com/news/news-details/2019/Betgenius-launches-live-streaming-service-for-sportsbooks/default.aspx.)

Key Features	Accused Product
	In order to protect client from unauthorized access and malicious traffic within the application to platform, client **must** implement the solution described in detail below. The described workflow will guarantee that only authorized (logged-in) user can access the widget and only through client's website. If the below is implemented, non-logged in users should notbe able to construct betslips within the Multibet widget. The widget, and all calls to get probabilities/prices should pass through a reverse proxy which ensures that the the person requesting the price or widget is known to the bookmaker. The "Add-to-Betslip" action is a client side javascript initiated event which the bookmaker website or webview should be listening to. This event is described in more detail further down this document. When the punter adds to the betslip, a call is made through the reverse proxy to create the market in the bookmaker trading platform. To allow the widget on the web to properly authenticate the exact solution described below needs to be implemented by the bookmaker for their reverse proxy which does authentication. (*See,* PANDA_000228, https://geniussports.atlassian.net/wiki/spaces/BID/pages/1277034498/Authenticating+user+session+using+a+proxy+service.)

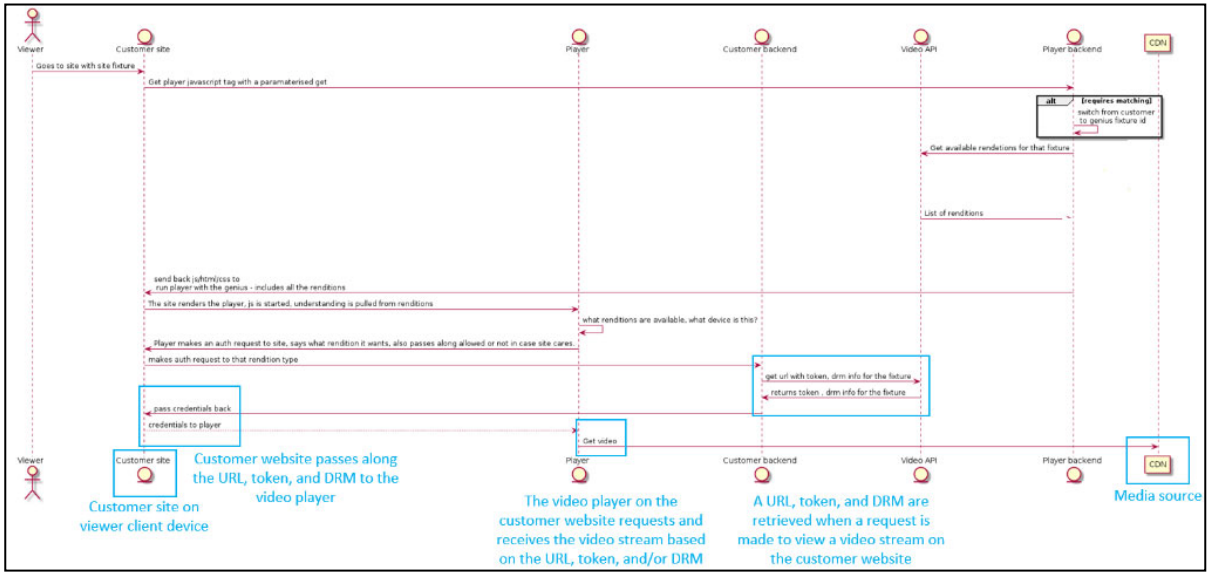
Key Features	Accused Product
	1. Player will access client's website, which hosts an iframe. Iframe would point to the Genius Sports Integration page endpoint **(https://gsm-widgets-uat.betstream.betgenius.com/...).** 2. Genius Sports integration Iframe page would point to client's reverse proxy, which in turn forwards the request transparently in the background to Multibet app **(www.customer.com/multibet). NB! Proxy must be located in the root path of the domain.** 3. Webserver hosting the Multibet widget will be IP whitelisted to allow traffic only from customer's reverse proxy. 4. Multibet widget is then executed/rendered in player's device/browser. 5. Backend calls within the widget will be passing through client's proxy. Each call will be using relative paths. 6. If player creates a betslip ("Add-to-BetSlip") then the associated back-end call (V1: "addorupdatebetslip", V2: "savebetslip") will be intercepted to check if the user session is logged. (*See,* PANDA_000228-PANDA_000229, https://geniussports.atlassian.net/wiki/spaces/BID/pages/1277034498/Authenticating+user+session+using+a+proxy+service.) Introduction This API call is to send real time data to the Warehouse/Statistics Engine. It is accomplished by sending a stream of messages over a long running socket. Pending network problems the connection should remain open for the length of the match. Connection There are two different ways to establish a publish connection to the system a HTTP method or a RAW method. These two different ways exists to enable the client to potentially work around any port or proxy problems present at in venue areas. Connections can also be sent over one of two different ports, 80 or 5522 The same data, parameters and format is used in both methods, only the startup of the connection differs.

Key Features	Accused Product

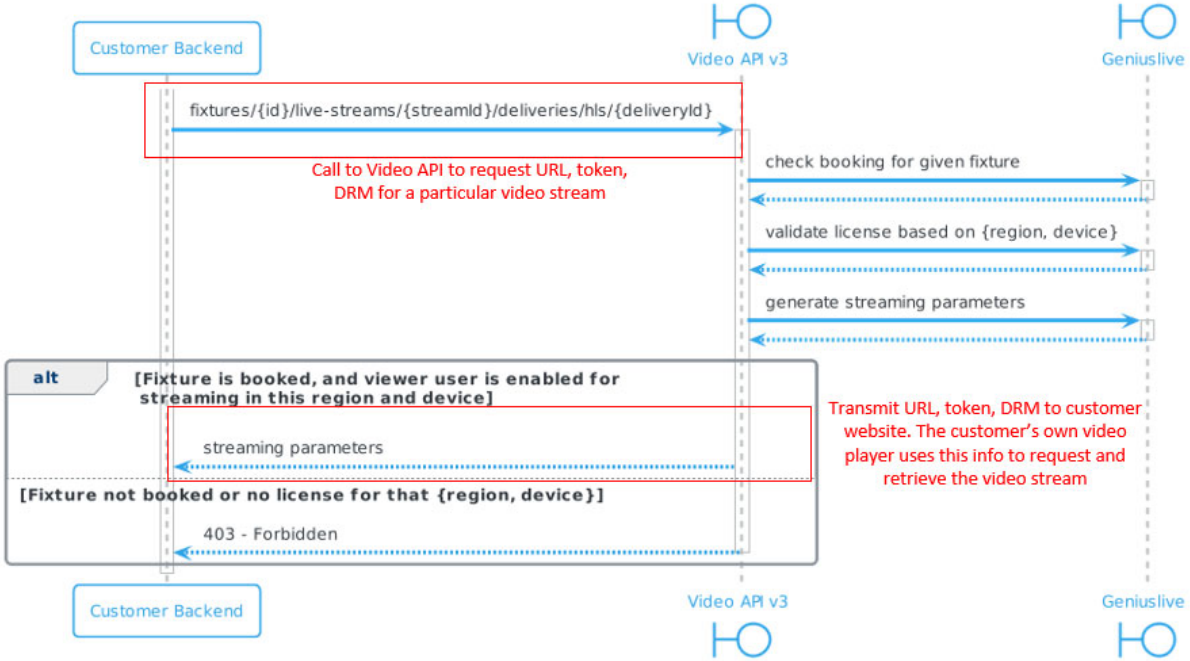
	RAW
	
	In the RAW method, a socket is opened to the streaming API endpoint and the request string is sent, followed by two carriage returns (`\n\n`) or two carriage return line feeds (`\r\n\r\n`). To initiate RAW mode the nohttp parameter must be present and set in the request string.
	
	`/v2/{sport}/publish`
	
	Example - HTTP
	`POST /v2/basketball/publish?streamKey=TESTSTREAMKEY&timestamp=1412987153 HTTP/1.1`
	`Host: localhost:8000`
	`Connection: keep-alive`
	
	Example - RAW
	`/v2/basketball/publish?nohttp=1&streamKey=TESTSTREAMKEY&timestamp=1412987153`
	
	(*See,* PANDA_000139-PANDA_000141, https://developer.geniussports.com/warehouse/livestream/publish/index_football.html.)

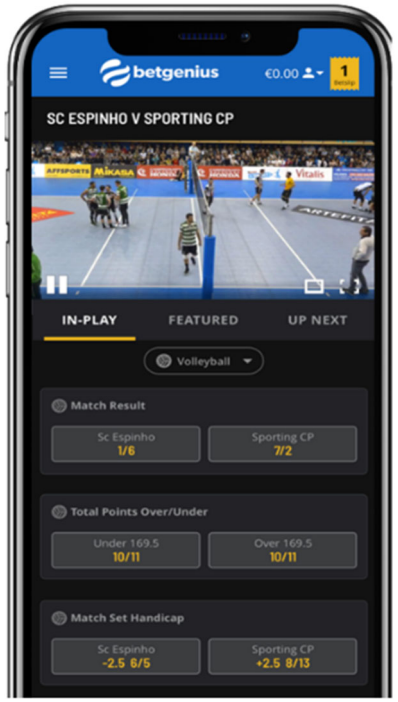
[1C.1] a first Internet address of a first media source to establish a first video Internet communication channel between the first media source and the first viewer client device to carry the first digital content relating to the first sporting event; and	Genius Sports' streaming product includes at least one webserver to transmit "*a first Internet address of a first media source to establish a first video Internet communication channel between the first media source and the first viewer client device to carry the first digital content relating to the first sporting event;*" Genius Sports offers two options for sportsbooks to receive their live video stream offerings: (1) a Drop & Play video player developed in-house by Genius Sports that can be embedded in a sportsbook's webpage, and (2) a video API that can facilitate access to Genius Sport's live streams using a sportsbook's own video player. Both options result in a copy of a video stream being provided to a client device. Specifically, authentication data (e.g., a URL, token, DRM) is transmitted to the client device, which is passed to a video player on the client device (e.g., the video player embedded in a sportsbook's

Key Features	Accused Product
	website). The video player then requests and receives a copy of the video stream from an appropriate CDN using the authentication data. <u>Option (1): Drop & Play</u> For this option, Genius Sports provides a video player widget that can be integrated by a sportsbook into their website. When a user/viewer requests a video stream while using the sportsbook's website, the back-end of the sportsbook's website transmits a query to Genius Sport's video API to retrieve authentication data related to the selected video stream. When the sportsbook's website retrieves this information, the authentication data is passed along to the video player, which in turn transmits a request from a CDN to retrieve the video stream. In this manner, a copy of the video stream is provided to the video player on the viewer client device via a communication channel between the CDN and the viewer device. This process is depicted below. Insert a script tag defining the desired fixture and the bookmaker source: 1 `<script` 2 `  src="https://genius-live-player-production.betstream.betgenius.com/widgetLoader?customerId=YOUR_CUSTOMER_ID&fixtureId=YOUR_FIXTURE_ID">` 3 `</script>` Insert an element with defined id to attach the video player to it, should be the exact same one used as the script **containerId** parameter 1 `<div id="YOUR_CONTAINER_ID" /> <!-- Defaults to geniusLive if a containerId is not set -->` Add an event listener in your website to listen to the player ready event and when this triggers call our API to retrieve the stream-url and token and hand this response back to our player. Everything else is taken care of

Key Features	Accused Product
	How does it work? You embed a script tag in your site with the querystring parameters you are interested in passing to the player. Our player looks at the stream types available for the specific fixture you are trying to display and picks the most appropriate stream for your viewers device. Our script will then raise an event out to the containing window, with the necessary information to make a call to our API from your backend. *Our API should never be called from the browser directly.* The call to our backend, which is per fixture viewer session, retrieves a url, a token and any DRM information which you may need to play the fixture. You hand the response straight back to our player and it will play the fixture. Sensible HTTP error codes will be returned from our API around the status of the fixture and whether you have booked it.  (*See,* PANDA_000541, PANDA_000550, https://dap-docs.betstream.betgenius.com/how-to-integrate.) <u>Option (2): Video API</u> For this option, the approach is similar to Option (1) in that the back-end of the sportsbook's website first requests and retrieve authentication data (e.g., a URL, a token, and/or DRM) related to the selected video

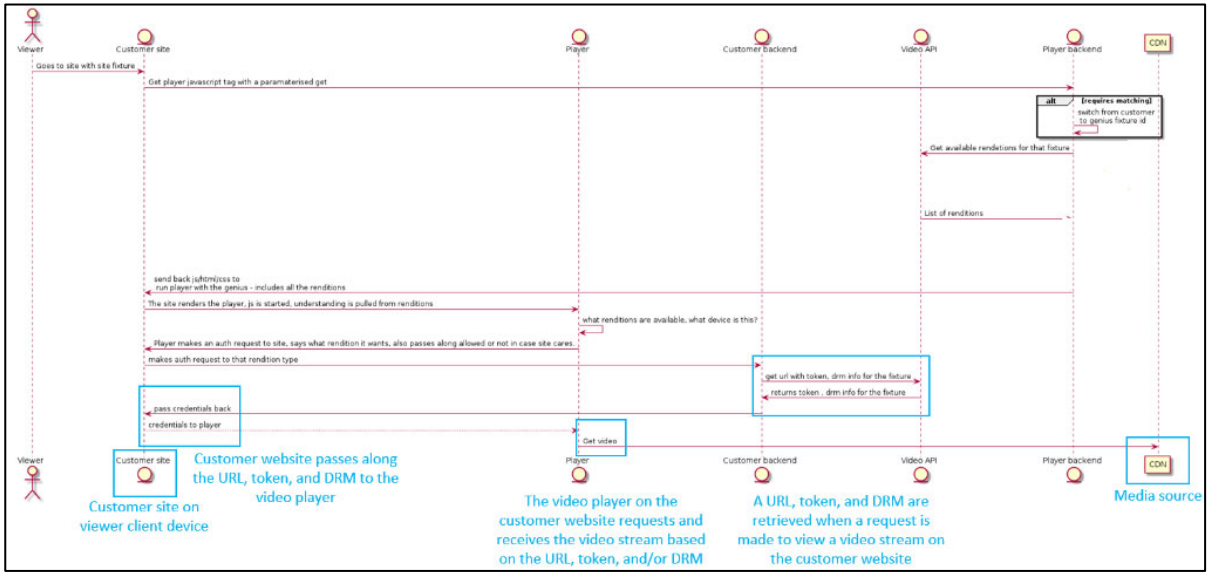
Key Features	Accused Product
	stream and then passes this information along to a video player to request and retrieve the video stream. In this option, the sportsbook provides their own video player, which is configured to use CDN token authentication. A copy of the video stream is provided to the sportsbook's own video player on the viewer device via a communication channel between the CDN and the viewer device. This process is depicted below. **GL-Video-v3** 3.0.33 [Base URL: api.geniussports.com/Video-v3/PRODSTD] https://explorer.api.geniussports.com/Video/v3/PRODSTD/swagger-latest.json **Video Streaming API** The video streaming API is used by customers to: • Retrieve the schedule of upcoming streams. • Retrieve the streaming parameters for a particular fixture. • Retrieve the full list of possible regions for playback. This API does not deliver the video stream itself, it only tells what are the specific parameters for streaming a given fixture. It is up to the users of this API to configure a video player with the streaming parameters. This API must never be called from the browser/client side. Instead, the API should be integrated into your server-side systems. This avoids exposing authentication credentials and manage the load on Geniuslive systems. **Player integration** You will need to add the necessary logic in your web site to call your backend to retrieve the schedule and the streaming parameters described before. Also, you will need to integrate a player in your site that can apply CDN token authentication. For specific competitions your player will also have to decrypt content using DRM. **Playing the content** Once you have retrieved the schedule and you have selected a fixture to watch, your site should do the following per viewer: 1. Geo-locate the viewer to know the region where the playback is requested 2. Validate if the viewer meets at least one of the permissions required by the selected live stream 3. Select the appropriate delivery to play from the selected live stream. You might need to check the client's platform to choose between HLS or DASh deliveries. 4. Call your backend to get the streaming parameters from the Video API. 5. Play the content using CDN token authentication (and DRM for specific competitions)

Key Features	Accused Product
	 (*See,* PANDA_00217, PANDA_00222, https://swaggerui.api.geniussports.com/?url=https://explorer.api.geniussports.com/Video%2Fv3%2FPRODSTD%2Fswagger-latest.json.)
[1C.2] a first socket address of the first event socket to establish the first event information Internet communication channel to carry the online gaming information.	Genius Sports' streaming product includes at least one webserver to transmit "*a first socket address of the first event socket to establish the first event information Internet communication channel to carry the online gaming information.*" For example, Genius Sports' streaming product practices a system/method for providing a requested video stream to a viewer via a port. The RAW method is used to send from the API the port number from where the stream is to be received. The request from the user has multiple return line feeds which return the video feed to the client device form the assigned port/socket via the internet.

Key Features	Accused Product
	 (*See,* PANDA_000015, https://investors.geniussports.com/news/news-details/2019/Betgenius-launches-live-streaming-service-for-sportsbooks/default.aspx.) Genius Sports' streaming product combines live sports data and live sports video.

Key Features	Accused Product

	New content is complemented by complete official data offering and will plug crucial gaps in in-play betting schedules – bet365 among the first to go live with the product.
	
	Betgenius, a leading supplier of data and trading services to sportsbooks, has launched a live streaming service giving operators access to new content from sport competitions around the world.
	
	Derived from partnerships with official rights holder across multiple sports, the service features thousands of low latency streams including content which has never before been available to sportsbooks.
	
	By focusing on fixtures played at off-peak times, the service allows operators to offer a more engaging experience right around the clock, enhancing bet placement and customer retention during quiet scheduling periods.
	
	All video, captured direct from pitch or courtside, is paired with official data and live betting services, and features easy-access API integration.
	
	International operator bet365 is among the first sportsbooks to go live with the product, with more to be announced in the coming weeks.
	
	Jack Davison, Chief Commercial Officer at Genius Sports Group, said: "Our close relationships with sports rights holders across the world have given us access to new, high quality streaming content which will significantly enhance our sportsbook partners' in-play products.
	
	"Combined with fast, accurate data on thousands of fixtures, this is a new and cost-effective way to attract more customers with a complete and immersive live betting experience."
	
	(*See,* PANDA_000015-PANDA_000016, https://investors.geniussports.com/news/news-details/2019/Betgenius-launches-live-streaming-service-for-sportsbooks/default.aspx.)
	
	Insert a script tag defining the desired fixture and the bookmaker source:
	
	`<script src="https://genius-live-player-production.betstream.betgenius.com/widgetLoader?customerId=YOUR_CUSTOMER_ID&fixtureId=YOUR_FIXTURE_ID">`
	`</script>`
	
	Insert an element with defined id to attach the video player to it, should be the exact same one used as the script **containerId** parameter
	
	`<div id="YOUR_CONTAINER_ID" /> <!-- Defaults to geniusLive if a containerId is not set -->`
	
	Add an event listener in your website to listen to the player ready event and when this triggers call our API to retrieve the stream-url and token and hand this response back to our player. Everything else is taken care of

Key Features	Accused Product
	How does it work? You embed a script tag in your site with the querystring parameters you are interested in passing to the player. Our player looks at the stream types available for the specific fixture you are trying to display and picks the most appropriate stream for your viewers device. Our script will then raise an event out to the containing window, with the necessary information to make a call to our API from your backend. *Our API should never be called from the browser directly.* The call to our backend, which is per fixture viewer session, retrieves a url, a token and any DRM information which you may need to play the fixture. You hand the response straight back to our player and it will play the fixture. Sensible HTTP error codes will be returned from our API around the status of the fixture and whether you have booked it.  (*See,* PANDA_000541, PANDA_000550, https://dap-docs.betstream.betgenius.com/how-to-integrate.)

Key Features	Accused Product

	Introduction
	This API call is to send real time data to the Warehouse/Statistics Engine. It is accomplished by sending a stream of messages over a long running socket. Pending network problems the connection should remain open for the length of the match.
	
	Connection
	There are two different ways to establish a publish connection to the system a HTTP method or a RAW method. These two different ways exists to enable the client to potentially work around any port or proxy problems present at in venue areas. Connections can also be sent over one of two different ports, 80 or 5522
	
	The same data, parameters and format is used in both methods, only the startup of the connection differs.
	
	RAW
	In the RAW method, a socket is opened to the streaming API endpoint and the request string is sent, followed by two carriage returns (`\n\n`) or two carriage return line feeds (`\r\n\r\n`). To initiate RAW mode the nohttp parameter must be present and set in the request string.
	
	`/v2/{sport}/publish`
	
	Example - HTTP
	`POST /v2/basketball/publish?streamKey=TESTSTREAMKEY&timestamp=1412987153 HTTP/1.1`
	`Host: localhost:8000`
	`Connection: keep-alive`
	
	Example - RAW
	`/v2/basketball/publish?nohttp=1&streamKey=TESTSTREAMKEY&timestamp=1412987153`
	
	(*See,* PANDA_000139-PANDA_000141, https://developer.geniussports.com/warehouse/livestream/publish/index_football.html.)

2. Dependent Claim 4

Key Features	Accused Product
[4.P] The system of claim 1, wherein:	*The* Genius Sports' streaming product includes a system of claim 1. S*ee* Claim 1*, supra.*
[4A] in C), the at least one webserver transmits, to a second viewer client device of the plurality of viewer client devices, the first socket address of the first event socket to establish a second event information Internet communication channel between the first event socket and the second viewer client device; and	Genius Sports' streaming product includes a system where "*at least one webserver transmits, to a second viewer client device of the plurality of viewer client devices, the first socket address of the first event socket to establish a second event information Internet communication channel between the first event socket and the second viewer client device*." For example, Genius Sports' streaming product sends "a stream of messages over a long running socket" to accomplish the "API call to send real time data to the Warehouse/Statistics Engine." Introduction This API call is to send real time data to the Warehouse/Statistics Engine. It is accomplished by sending a stream of messages over a long running socket. Pending network problems the connection should remain open for the length of the match. Connection There are two different ways to establish a publish connection to the system a HTTP method or a RAW method. These two different ways exists to enable the client to potentially work around any port or proxy problems present at in venue areas. Connections can also be sent over one of two different ports, 80 or 5522 The same data, parameters and format is used in both methods, only the startup of the connection differs. RAW In the RAW method, a socket is opened to the streaming API endpoint and the request string is sent, followed by two carriage returns (`\n\n`) or two carriage return line feeds (`\r\n\r\n`). To initiate RAW mode the nohttp parameter must be present and set in the request string. `/v2/{sport}/publish`

Key Features	Accused Product

	Example - HTTP
	`POST /v2/basketball/publish?streamKey=TESTSTREAMKEY&timestamp=1412987153 HTTP/1.1`
	`Host: localhost:8000`
	`Connection: keep-alive`
	Example - RAW
	`/v2/basketball/publish?nohttp=1&streamKey=TESTSTREAMKEY&timestamp=1412987153`
	(*See,* PANDA_000139-PANDA_000141, https://developer.geniussports.com/warehouse/livestream/publish/index_football.html.)

[4B] in B), the at least one socket server transmits at least some of the first event information, including the online gaming information germane to the first sporting event, to the second viewer client device via the second event information Internet communication channel, such that the online gaming information is shared in a synchronized manner by the first viewer client device and the second viewer client device.	Genius Sports product includes a system where "*at least one socket server transmits at least some of the first event information, including the online gaming information germane to the first sporting event, to the second viewer client device via the second event information Internet communication channel, such that the online gaming information is shared in a synchronized manner by the first viewer client device and the second viewer client device.*" *See* Claim 1 *supra*. In addition, in Genius Sports' streaming product, "data is synchronized with Genius' data distribution network, ensuring low latency, accurate, reliable delivery of play-by-play data." *Fail-safe data and video capture* Genius' in-venue data collection systems are designed to continue to function when disconnected from supporting systems, ensuring statisticians can continue to collect rich sports data unimpeded. When disconnected from the internet, these systems will continue to support officials, teams, scoreboards, and broadcasters in the venue. While connected, data is synchronized with Genius' data distribution network, ensuring low latency, accurate, reliable delivery of play-by-play data. The unique sport-specific user interface workflows ensure the most time critical data is delivered at the earliest opportunity while still allowing the collection of a rich dataset. Supplementing the data solutions, automated cameras allow sports leagues to produce live streaming content for delivery through the distribution network. Automated monitoring, remote management, and AI-driven production mean minimal interaction is required from sports leagues once the solution has been installed which, alongside Genius' innovative hardware solution, reduces production costs.

Key Features	Accused Product
	(*See,* PANDA_00231 at PANDA_000254, https://www.sec.gov/Archives/edgar/data/1834489/000119312521184911/d196130df1.htm.)