

**United States Court of Appeals  
for the Federal Circuit**

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**ARISTOCRAT TECHNOLOGIES AUSTRALIA PTY  
LIMITED AND ARISTOCRAT TECHNOLOGIES,  
INC.,**  
*Plaintiffs-Appellants,*

v.

**INTERNATIONAL GAME TECHNOLOGY AND IGT,**  
*Defendants-Appellees.*

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2010-1426

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Appeal from the United States District Court for the  
Northern District of California in No. 06-CV-3717, Senior  
Judge Ronald M. Whyte.

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Decided: March 13, 2013

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Before O'MALLEY, BRYSON\*, and LINN\*\*, *Circuit Judges*.

O'MALLEY, *Circuit Judge*.

Aristocrat Technologies Australia PTY Limited and Aristocrat Technologies, Inc. (collectively, "Aristocrat") and International Game Technology and IGT (collectively, "IGT") compete in the casino gaming machine industry. In 2006, Aristocrat brought the current action against IGT in the Northern District of California alleging that IGT directly and indirectly infringes two of Aristocrat's patents—U.S. Patent No. 7,056,215 ("the '215 patent") and U.S. Patent No. 7,108,603 ("the '603 patent"). The asserted patents generally relate to gaming machines, such as slot machines, and claim methods for awarding a progressive prize through a bonus game that may appear in addition to the main game. Aristocrat accuses IGT gaming devices that feature various bonus games in which a player may win progressive prizes. Following remand from a previous appeal, IGT moved for summary judgment of noninfringement.

On May 13, 2010, the district court granted IGT's motion for summary judgment of noninfringement as to all asserted claims of both patents explaining that IGT's

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\* Circuit Judge Bryson assumed senior status on January 7, 2013.

\*\* Circuit Judge Linn assumed senior status on November 1, 2012.

accused products require two separate actors: (1) the casino via the gaming machine and (2) the player. Under our decision in *Muniauction*, the district court found that the lack of a single entity performing all of the steps of the asserted claims precludes direct infringement as a matter of law. *See Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1330 (Fed. Cir. 2008). While Aristocrat's appeal of the district court's claim construction and summary judgment ruling was pending, we issued our en banc decision in *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301 (Fed. Cir. 2012). We affirm the district court's claim constructions and its ruling on direct infringement and, in light of our decision in *Akamai*, we vacate and remand the portion of the district court's ruling on indirect infringement.

## BACKGROUND

### A. Patents In Suit

The '215 patent, entitled "Slot Machine Game and System With Improved Jackpot Feature," issued on June 6, 2006. As described in the specification, the claimed invention related to a system of linked gaming machines through which an allegedly improved jackpot mechanism is provided to a player. Incremental jackpots, i.e., the payout of an additional prize from a slot machine based on predetermined conditions in combination with randomly selected criteria, are well known in the prior art. According to the '215 patent, however, these prior art systems lack flexibility in both operator control and the ability to tailor the awarding of prizes to player preferences. As an improvement on these existing systems, the '215 patent describes a system wherein an additional prize is awarded to a player through a secondary feature game appearing after the main game is completed. Through the use of this secondary game to award a progressive jackpot, the '215 patent provides a system by which progressive jackpots can be linked across gaming

platforms (e.g., slot machines, cards, keno, bingo or pachinko), are awarded based on credits wagered, and can be adjusted without changing the main game. Claim 1 of the '215 patent is exemplary for our purposes:

In a network of gaming machines, each of said gaming machines having a user interface activatable by a player to affect game display, each of said gaming machines being capable of accepting different wager amounts made by the player, a method of randomly awarding one progressive prize from a plurality of progressive prizes using a second game to select said one progressive prize, a display of said second game being triggered upon an occurrence of a random trigger condition having a probability of occurrence related to the amount of the wager, comprising:

making a wager at a particular gaming machine in the network of gaming machines;

initiating a first main game at said particular gaming machine;

causing a second game trigger condition to occur as a result of said first main game being initiated, said second game trigger condition occurring randomly and having a probability of occurrence dependent on the amount of the wager made at said particular gaming machine, said step of causing the second game trigger condition including:

- (1) selecting a random number from a predetermined range of numbers;
- (2) allotting a plurality of numbers from the predetermined range of

numbers in proportion to the amount of the wager made at said particular gaming machine, said step of allotting including allotting one number for each unit of currency of the amount wagered; and

(3) indicating the occurrence of the second game trigger condition if one of the allotted numbers matches the selected random number;

triggering a second game to appear at said particular gaming machine in response to said occurrence of said second game trigger condition, said second game appearing after completion of said first main game;

randomly selecting said one progressive prize from said plurality of progressive prizes that has been won;

displaying said second game to the player at said particular gaming machine in response to said triggering;

activating said user interface at said particular gaming machine by said player during said displaying of said second game to affect the display of said second game;

identifying to the player said one progressive prize from said plurality of progressive prizes that has been won; and

awarding said one progressive prize from said plurality of progressive prizes that has been won.

'215 patent col. 8 l. 45 – col. 9 l. 25. Figure 2 of the '215 patent shows the algorithm by which the system awards a

progressive prize to a player.

U.S. Patent

Jun. 6, 2006

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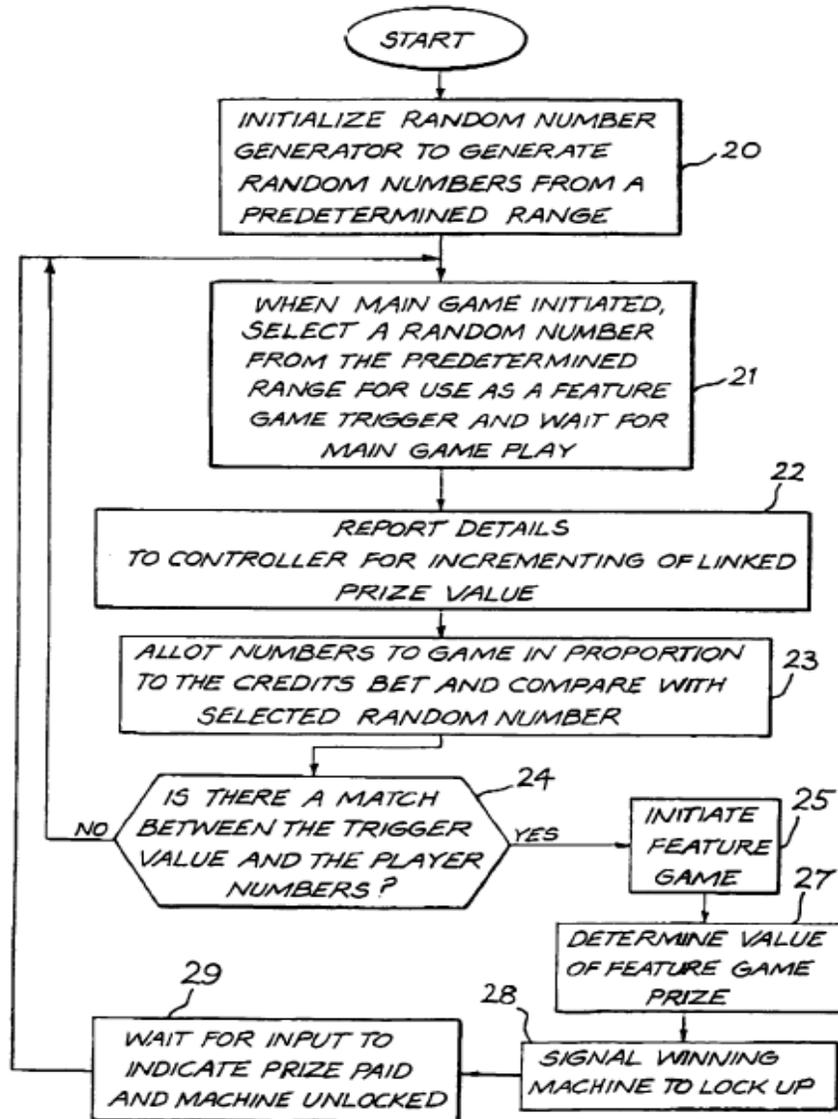


FIG. 2

Through this algorithm, random numbers are generated

from a predetermined range based on the preferences of the operator. The system then selects a random number from that range and allocates a contribution to the progressive prize based on the number of credits wagered by the player. The player's numbers are then selected, again based on the number of credits wagered, and compared to the random number generated in step 21. If the random number matches one of the player's numbers, the system initiates the feature game through which the value of the progressive jackpot to be paid to the player is determined. If the feature game is not triggered—i.e., there is not a match between one of the player's numbers and the random number—a new random number is selected and the system waits for the main game to be initiated again.

The '603 patent, also entitled "Slot Machine Game and System With Improved Jackpot Feature," issued on September 19, 2006 and is a continuation of the '215 patent. The claims of the '603 patent are substantially similar for the purposes of this appeal to the claims of the '215 patent except that they lack the step of "activating said user interface at said particular gaming machine by said player during said displaying of said second game to affect the display of said second game." The removal of this step means the progressive jackpot awarded to the player is selected randomly rather than based on input from the player.

## B. Procedural History

On June 12, 2006, Aristocrat filed suit against IGT for infringement of the '215 patent in the United States District Court for the Northern District of California. Aristocrat amended its complaint to assert infringement of the '603 patent upon the issuance of that patent. After the parties completed claim construction briefing, IGT moved for summary judgment of invalidity based on a theory that the '215 patent was abandoned and that Aristocrat failed to properly revive the application. In

addition, according to IGT, the improperly revived '215 patent application anticipated the '603 patent under 35 U.S.C. § 102(b). The district court granted IGT's motion on June 13, 2007 and entered final judgment in favor of IGT. *Aristocrat Techs. Austl. Pty, Ltd. v. Int'l Game Tech.*, No. 06-CV-3717, 2007 U.S. Dist. LEXIS 97582 (N.D. Cal. Sept. 4, 2007). Aristocrat timely appealed and, on September 22, 2008, we reversed the judgment of the district court finding "that improper revival may not be asserted as a defense in an action involving the validity or infringement of a patent." *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 543 F.3d 657, 663 (Fed. Cir. 2008). Accordingly, we remanded the case to the district court.

On February 19, 2009, IGT filed a Motion for Summary Judgment of Noninfringement (IGT's "Motion") arguing, based on a joint infringement defense, that IGT performs some, but not all, of the claimed steps in the asserted patents. The district court held a claim construction hearing on March 18, 2009, based on the briefing filed prior to the first appeal. On May 14, 2009, the district court entered its claim construction order and ordered supplemental briefing on terms—including "making a wager" and "awarding"—at issue in this appeal. The parties addressed the supplemental terms in the remaining briefing on IGT's Motion.

On May 13, 2010, the district court granted summary judgment in favor of IGT. The district court analyzed Aristocrat's infringement contentions under the framework we set forth in *Muniauction*, whereby direct infringement requires a single party to perform every step of a claimed method and, where more than one party performs the steps of the claimed method, there can be no infringement absent direction or control over the entire process by the accused party. *Aristocrat Techs. Austl. Pty, Ltd. v. Int'l Game Tech.*, 714 F. Supp. 2d 991, 995 (N.D. Cal. 2010). Finding it "undisputed that the 'activating user interface' step is performed by the player, not by the

gaming machine,” and thus the ’215 patent requires that “at least one step must be performed by the player, and at least one step must be performed by the gaming machine,” the district court turned to the question of whether IGT exercised direction or control over the player’s performance of the “activating a user interface” step. *Id.*

The district court first rejected Aristocrat’s theory that IGT’s provision of free credits to a player is sufficient direction or control such that a player’s actions are attributable to IGT. Next, the court addressed Aristocrat’s contention that IGT infringes the claimed methods through its testing of the accused machines by IGT employees. While the “testing” theory of infringement solved Aristocrat’s divided infringement problem with respect to the “activating a user interface” limitation, the district court found that IGT failed to practice the step of “awarding said one progressive prize from said plurality of progressive prizes that has been won” while testing the machines. As a matter of claim construction, the district court held that the “awarding” step “requires more than displaying the amount of the prize won.” *Id.* at 997. Thus, because “[i]t is undisputed that during the testing of gaming machines legal entitlement to a prize is never conferred upon IGT employees,” the district court found that the “awarding” step is not performed during testing. *Id.*

With respect to the ’603 patent—which lacks the “activating a user interface” limitation—the district court analyzed whether the “making a wager” step also requires some action by a player. Considering both the intrinsic evidence, in the form of the shared specification of the ’215 and ’603 patents and the prosecution history of the ’215 patent, and the extrinsic evidence, introduced through expert testimony submitted by Aristocrat, the district court rejected Aristocrat’s contention that “making a wager” means processing a bet. Rather, the court agreed with IGT and construed the term “to mean betting,

which is an act performed by the player.” *Id.* at 1000. The court also noted that, until IGT brought its Motion, Aristocrat interpreted “making a wager” as a step performed by the player as opposed to the operator of the gaming machine. *Id.* Having previously considered and rejected Aristocrat’s contention that IGT directs or controls the players by providing free credits and that IGT performs the “awarding” step while testing the machines, the district court granted summary judgment of noninfringement in favor of IGT on both the ’215 and ’603 patents.

On June 15, 2010, the district court granted Aristocrat’s motion for entry of final judgment of noninfringement. Aristocrat timely appealed and we have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

On appeal, Aristocrat contests the district court’s construction of “making a wager” and “awarding said one progressive prize.” Aristocrat also argues that material issues of fact exist as to whether IGT performs the “making a wager” and “awarding” steps under the district court’s constructions. IGT contends, in turn, that the district court correctly construed these terms and that summary judgment of noninfringement is separately supportable because, in the accused devices, the bonus game appears before, rather than after, the conclusion of the main game, and thus does not satisfy the limitation that the “second game appears after completion of said first main game.”

##### A. Claim Construction

We review claim construction de novo. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). To interpret the claims, we look first to the intrinsic evidence in the record, including the claim language, the written description, and the prosecution history.

*Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Although it is less significant than intrinsic evidence, a court can consider extrinsic evidence in the record, which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted)(citation omitted). A claim’s preamble may limit the claim when the claim drafter uses the preamble to define the subject matter of the claim. *Allen Eng’g Corp. v. Bartell Indus.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002).

1. “awarding said one progressive prize”

In granting summary judgment for IGT, the district court found no evidence that the patentee intended the term “awarding said one progressive prize” to mean something other than its ordinary meaning. Thus, the court construed the “awarding prize” limitation as conferring rights to a prize as opposed to simply displaying for viewing the amount of the prize won. Specifically, the district court found that the claims of the ’215 patent include both the steps of identifying the prize to a player and awarding said prize to the player; if the awarding step could be met by displaying the prize amount, the identifying step would be rendered superfluous. Because “[i]t is undisputed that during the testing of gaming machines, legal entitlement to a prize is never conferred upon IGT employees,” the district court determined that the “awarding step” was not performed by IGT during the testing of the machines and summary judgment in favor of IGT was appropriate. *Aristocrat*, 714 F. Supp. 2d at 997.

Aristocrat argues on appeal that, contrary to the district court’s construction, the “awarding” step does not “require a transfer of legal entitlement to the prize” and that “awarding” means “presenting” or “display[ing]” to

“the player the monetary amount determined to be due.” Appellant’s Br. at 31-32. Aristocrat first argues that “the intrinsic evidence shows that the ‘awarding’ step occurs when the gaming machine presents” or “display[s] to the player” a “monetary amount due.” *Id.* at 32. For example, because the preamble of each of the claims begins with: “In a network of gaming machines . . . ,” Aristocrat asserts that the specification confirms its understanding that the system itself, without involvement of the game operator or the player, performs the awarding step. Aristocrat also points to the statement that:

[p]referably, the prize awarded in a jackpot game by the system of the present invention, is a monetary amount the value of which is incremented with each game played on each gaming machine or console in the system. Alternatively, the incrementation can take place on a per token bet basis.

’215 patent col. 4 ll. 45-50. And according to Aristocrat, that Figure 2 depicts a “prize awarding algorithm” that may be programmed into the gaming machine in an embodiment of the claimed method is further evidence that the system performs the awarding step without involvement of the player. Finally, Aristocrat argues that defining “awarding” in terms of conferring a “legal entitlement” produces an absurd result, wherein “claim scope could differ from jurisdiction to jurisdiction, depending on what constitutes ‘legal entitlement.’” Appellant’s Br. at 36. The awarding step, therefore, could never be met “by a gaming machine in Utah or Hawaii because under their laws no person is legally entitled to an award by a slot machine.” *Id.* at 37. Yet, in other states where gambling is legal, Aristocrat argues, “that same person playing the same machine with the same outcome may be legally entitled to an award.” *Id.*

IGT counters that Aristocrat’s construction is “at odds

with the ordinary meaning of ‘awarding’” in that it fails to correspond to the dictionary definitions cited by Aristocrat. Appellee’s Br. at 33. IGT also contends that Aristocrat’s construction is inconsistent with the claim language surrounding the term at issue. Specifically, as did the district court, IGT points to the additional steps of “displaying” and “identifying” the prize as confirmation that awarding means conferring an entitlement, rather than “presenting” the amount due. Thus “awarding” must have a different meaning from those other terms and Aristocrat’s construction “would render the ‘identifying’ step superfluous.” *Id.* at 35 (citing *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”)). And, the “construction that Aristocrat would give to ‘awarding,’ i.e., displaying to the player the amount to be awarded, is precisely the same action that is performed in the immediately preceding step[] [of] ‘identifying to the player said one progressive prize . . . that has been won.’” Appellee’s Br. at 35.

IGT also argues that the specification uses “award” and “pay” interchangeably. First, IGT points to the specification’s descriptions of prior art schemes for inducing play at slot machines:

Many schemes have been devised in the past to induce players to play slot machines including schemes such as specifying periods during which jackpot prizes are increased or *bonus jackpots paid*. Other schemes involve *awarding an additional prize* to a first player to achieve a predetermined combination on a poker machine.

’215 patent col. 1 ll. 13-18 (emphasis added);

[O]ne . . . prior art arrangement . . . *pays the jackpot prize* when the count reaches some predetermined and randomly selected number. In a more

recent prior art arrangement, . . . the *prize is awarded* to a machine when the game number it is allocated matches a preselected random number.

'215 patent col. 1 ll. 26-35 (emphasis added). IGT also refutes Aristocrat's reliance on Figure 2 and argues that "Figure 2 and a discussion of it in the specification make clear that paying the award is part of the awarding process." Appellee's Br. at 37. IGT notes that the last step on the flowchart depicted in Figure 2 is to "wait for input to indicate prize paid and machine unlocked." '215 patent Fig. 2. In addition, IGT cites the specification's discussion of Figure 2, which explains that:

In the preferred embodiment, a prize is always awarded to the jackpot feature game, the feature game being used to determine the size of the prize to be awarded (see step 27). The winning machine is then locked up (see step 28) and the controller awaits an indication that the prize has been paid before allowing the machine to be unlocked (see step 29). In some embodiments, the machine will not be locked up in steps 28 and 19, but instead the prize will simply be paid . . . .

'215 patent col. 6 ll. 38-45.

We agree with IGT and the district court that the awarding step must be construed as conferring rights from the operator of the game to the player. While Aristocrat does cite evidence suggesting that the "awarding" step is performed by a component within "a network of gaming machines," that evidence fails to show that awarding means "presenting to the player the monetary amount determined to be due." Aristocrat's reliance on the statement in the summary of the invention that "[p]referably, the prize awarded in a jackpot game by the system of the present invention, is a monetary amount the value of which is incremented with each game played

on each gaming machine or console in the system” is misplaced because that sentence merely describes the character of the prize to be awarded; it does not define what constitutes the awarding step. ’215 patent col. 4 ll. 44-48.

Aristocrat’s proposed construction of the “awarding” step is also inconsistent with the surrounding claim language. As noted by the district court and IGT, this claim language shows that “the ‘awarding prize’ step cannot be met simply by displaying [or ‘presenting’] the amount of the prize won” because “this would render the ‘identifying prize’ step superfluous.” *Aristocrat*, 714 F. Supp. 2d at 996. Aristocrat attempts to differentiate between these two steps by arguing that the “identifying” step involves “indicat[ing] which one of the four named progressive prizes is won” without displaying the amount of the prize, while the “awarding” step displays the amount of the prize. Appellant’s Br. at 34-35. This distinction lacks support in the intrinsic record and is inconsistent with the ordinary meaning of the terms “identifying” and “awarding.” Both steps use identical language to refer to the object of the claimed action: “said one progressive prize from said plurality of progressive prizes that has been won.” Yet, Aristocrat would have this language mean different things depending on the step in which it is used. In the “identifying” step, Aristocrat would have this language mean the “type” of progressive prize won, “e.g., grand, major, minor or mini.” *Id.* at 34. With respect to the “awarding” step, Aristocrat would have the identical language mean the “amount” of the progressive prize won. The only difference in the language of the two steps, however, is that one begins with “identifying to the player,” while the other begins with “awarding.” Aristocrat does not explain how this distinction supports two distinct meanings of “said one progressive prize from said plurality of progressive prizes that has been won.”

Nor does the specification support such a distinction. The '215 patent describes an embodiment in which the “feature jackpot screen and signs display which jackpot has been won,” but this description does not assign a different meaning to the “said one progressive prize” language depending on the step in which it appears. *See* '215 patent col. 8 ll. 10-11. Rather, this embodiment demonstrates that Aristocrat’s construction of the “awarding” step would render the identifying step superfluous. Specifically, the above-cited description uses “display” to describe the action which Aristocrat claims is performed during the “identifying” step, i.e., indicating what *type* of prize was won. And, “display” is the same verb Aristocrat uses to describe the action performed during the “awarding” step. Compare '215 patent col. 8 ll. 10-11 (“[T]he feature jackpot screens and signs *display* which jackpot has been won.”) (emphasis added), with Appellant’s Br. at 35 (“The ‘awarding’ step occurs when the ‘monetary amount’ . . . is *displayed* to the player in a jackpot game . . . .”) (emphasis added). If one were to substitute “display” for both “identifying” and “awarding” in the claims, the only distinction between the steps would be the “to the player” language in the identifying step. The absence of “to the player” in the “awarding” step, however, cannot justify Aristocrat’s proposed dichotomy wherein one step involves displaying the *monetary amount* of the prize while the other displays the *type* of prize won. The district court’s—and our—construction does not suffer from the same infirmity. Under the correct construction, “said one progressive prize from said plurality of progressive prizes that has been won” would have the same meaning in both steps, and the “identifying” step is not superfluous.

We also reject Aristocrat’s contention that the district court’s construction would result in inconsistent treatment of the patent in different jurisdictions. Gambling may be tolerated to a greater or lesser extent in different

states but we do not construe the awarding step—or view the district court’s determination—so narrowly as to be dependent on a particular state’s gambling regulations. The critical aspect of the construction of the “awarding” step is the transfer of the right to a prize from the casino operator to the player—a transfer that not even Aristocrat alleges occurs during IGT’s testing of their equipment. That a particular state’s law may complicate a player’s ability to enforce collection of their prize does not affect the operation of the system claimed in the asserted patents or our construction of the “awarding” step.

Finally, while we see no reason to resort to consideration of extrinsic evidence, given the clarity of the claim term itself and the support within the specification, we note that our construction is fully consistent with the dictionary definitions put forward by both parties. Aristocrat argues that, in relying on the dictionary definition, the district court imported an extraneous limitation into the claims. But, contrary to this contention, the district court simply used the provided definitions to inform its understanding of the “ordinary and customary” meaning of the word “award.” See *Phillips*, 415 F.3d at 1322-23 (“Dictionaries or comparable sources are often useful to assist in understanding the commonly understood meaning of words and have been used both by our court and the Supreme Court in claim interpretation.”); see also *id.* (“[J]udges are free to consult dictionaries . . . at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.”) (internal quotation marks omitted)(citation omitted).

## 2. “making a wager”

The claims of the asserted patents describe a network of gaming machines, “each of said gaming machines being

capable of accepting different wager amounts made by a player.” ’603 patent col. 8 ll. 8-10; *see also* ’215 patent col. 8 ll. 47-49, col. 9 ll. 28-30. As interpreted by the district court, this claim language “indicates that gaming machines *accept* wagers, while players *make* wagers.” *Aristocrat*, 714 F. Supp. 2d 991, 994 (N.D. Cal. 2010) (emphasis in original). Thus, the district court construed “making a wager” to mean betting, which is an act performed by the player.” *Id.* at 1000. Aristocrat contends that the district court improperly added the limitation that the act is performed by the player and that “making a wager” is merely carrying out a bet. Under Aristocrat’s proposed construction, all of the steps would have been performed by a single actor during normal play.

Aristocrat argues on appeal that the district court failed to recognize that when the claims require that a step be performed by the player—namely the “activating step” of the ’215 patent—the claim explicitly states “by the player” and that claim 4 of the ’215 patent—the method of claim 2 wherein the step of making a wager includes betting a plurality of credits—confirms that the gaming machine itself carries out a bet. Aristocrat’s contentions are inconsistent with the specification, however. For example, when describing the algorithm used by the gaming machine, the Abstract makes clear that credits are bet by the player:

Prior to each game, the gaming machine (10) selects a random number from a range of numbers and during each game, the machine allocates the first n numbers in the range, where n is the number of credits bet by the player in that game.

’215 patent at [57]. In addition, when describing prior art machines, the specification speaks in terms of the player as the actor doing the betting:

With some prior art combination based trigger arrangements there is a serious disadvantage in

that the *player betting a single token* per line, is just as likely to achieve a jackpot as the player playing multiple tokens per line. This has the effect of encouraging *players* playing for the bonus jackpot *to bet in single tokens, rather than betting multiple tokens per game*.

*Id.* col. 1 ll. 42-48 (emphasis added). The specification also appears to use “playing” and “betting” synonymously, referring, in both cases, to actions of the player:

Typically, it would be expected that the game return (RTP) is independent of the number of coins bet per line. With conventional progressive jackpot games though, increasing the *credits bet* per line creates a relative disadvantage as far as RTP is concerned. Lets [sic] say the start-up amount for a feature jackpot is \$10000. A *player* who is *playing 1 credit* per line has a chance for \$10000 for each *credit played*, whereas a *player playing 5 credits* per line only has a chance for \$2000 for each *credit played*. This creates a scale of diminishing returns. The smart *player* who gambles for the feature jackpot only, will always cover all playlines, but *will only bet 1 credit* per line because the prize paid for the feature jackpot is the same irrespective of the bet.

*Id.* col. 2 ll. 3-16 (emphasis added). The above passages show that: (1) “betting” is an action performed by the player; and (2) contrary to Aristocrat’s contention, the term “credits bet” refers to credits that were bet by the player.

Nor does the prosecution history support Aristocrat’s position that the machine itself makes the bet. As originally drafted, the “making a wager” step made clear that “betting” is performed by the player and that the machine “allows” such betting: “*allowing the player to bet a plurality of credits* for a single play at a gaming ma-

chine in the bank of gaming machines.” J.A. 575 (emphasis added). Through an amendment, Aristocrat modified the above language as follows, resulting in the language that issued as the “making a wager” step: “~~allowing the player to bet a plurality of credits for a single play~~ *making a wager* at a *particular* gaming machine in the bank *network* of gaming machines.” J.A. 629 (emphasis and strikethrough in original). By removing the reference to the actor that “allows” the betting, Aristocrat, at best, introduced ambiguity into the claim. The amendment did not clearly limit the claim to activity by the machine as opposed to the player.

Aristocrat further argues that the district court erroneously treated “wager”—as it appears in the phrase “making a wager”—and “wager amount”—as it appears in the preamble of claim 2 of the ’215 patent—as synonymous. According to Aristocrat, this error led the court to conclude that, because the preamble states that “wager amounts” are made by a player, “wagers” must also be made by a player. In doing so, Aristocrat contends, “the district court improperly rendered meaningless the term ‘amount’ in the preamble, and read the limitation ‘by a player’ into the phrase ‘making a wager.’” Appellant’s Br. at 45. In Aristocrat’s view, the player identifies a “wager amount” while the gambling machine “carrie[s] out” a “‘wager’ (or bet).” *Id.*

Aristocrat’s arguments lack merit. As the district court found, the use of “amounts” is necessary in the preamble passage but not in the “making a wager” step. An asserted purpose of the patented invention was to overcome a disadvantage in the prior art in which a player had no incentive to bet more than a single credit per game because the odds of winning the bonus were the same regardless of the number of credits bet. The patentee overcame this disadvantage by tying the odds of winning the bonus to the number of “credits bet,” i.e., the wager amount, made by the player. Thus, for the inven-

tion to work, the gaming machine must be “capable of accepting different wager amounts made by the player,” as the preamble recites; if a gaming machine could accept only one wager amount, e.g., a single credit, the machine could not perform the asserted purpose of the invention, i.e., varying the probability of the appearance of the feature game based on the number of credits bet. ’603 patent col. 8 ll. 9-10, ’215 patent col. 8 l. 48. Similarly, the “causing a second game trigger condition” step discusses the “amount of the wager” because, as in the preamble, the inclusion of “amount” was necessary to explain the relationship between the value of the wager and the probability of the feature game appearing. ’215 patent col. 8 ll. 59-64; col. 8 ll. 22-25 (“causing a second game trigger condition to occur . . . said second game trigger condition occurring randomly and having a probability of occurrence dependent on the *amount of the wager* made at said gaming machine . . .”) (emphasis added).

In the “making a wager” step it is unnecessary to refer to “amounts” because the step does not discuss tying the odds of the feature game’s appearance to the amount of the wager. Thus, contrary to Aristocrat’s contention, the district court did not treat “wager” as synonymous with “wager amounts.” Rather, it recognized that “wager amount” referred to the amount (or value) of the wager—i.e., the number of credits bet—whereas, standing alone, “wager” simply referred to a bet. The preamble makes clear that the player chooses “different wager amounts” and, absent contrary evidence, it is reasonable to conclude that the same actor that chooses “wager amounts” also makes “wagers.”

Aristocrat also claims that the district court “improperly disregarded” its expert’s declaration as conclusory. We agree with the district court’s characterization of Mr. Crevelt’s declaration and see nothing improper in discounting conclusory statements as “not useful.” See *Phillips*, 415 F.3d at 1318 (“[E]xtrinsic evidence in the

form of expert testimony can be useful to a court for,” *inter alia*, the purpose of “establish[ing] that a particular term in the patent or the prior art has a particular meaning in the pertinent field. However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.”) (citations omitted). While Crevelt’s declaration explains, at length, how a gambling machine’s software “carr[ies] out or implement[s] a bet by executing computer code,” it fails to explain whether the patent’s use of “making a wager” refers to: (1) the steps performed by the gaming machine when it implements a bet; or (2) to the antecedent acts performed by the player when she places a bet. *See* J.A. 442-43. Instead, Crevelt’s declaration “assumes that ‘making wager’ means processing a bet” and then explains how the machine performs the processing. The district court explained the circularity of Crevelt’s reasoning as follows:

Crevelt explains that microprocessors have been used to control gaming machines since the early 1980s, and whenever a bet is placed, microprocessors must carry out a sequence of programming steps, in particular, the step of transferring credits from the credit meter to the bet meter. Crevelt Decl. ¶¶ 6, 11. Since microprocessor involvement is required to process a bet, Crevelt concludes that “making a wager” necessarily refers to the procedure by which microprocessors transfer credits from the credit meter to the bet meter. *See id.* at ¶ 6 (“IGT’s proposed construction, in effect, would divest the gaming machine of any function related to processing a wager amount.”). This reasoning, however, begs the question since it assumes that “making a wager” means processing a bet. If “making a wager” refers to processing a bet, one may infer that “making a wager” describes this microprocessor step. On the other hand, if “making a wager” refers to the act of betting, then it

would describe an act by the player rather than the microprocessor.

*Aristocrat*, 714 F. Supp. 2d at 999 (footnote omitted).

Aristocrat urges us to find that *Phillips* requires only that an expert explain “how” a person of ordinary skill in the art would understand the term, but that an expert need not explain “why” a person of ordinary skill in the art would understand a term in a particular manner. This argument ignores *Phillips*’s teaching that “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.” 415 F.3d at 1318 (emphasis added). By failing to explain why a person of ordinary skill in the art would understand “making a wager” to describe the steps performed by the microprocessor in processing the bet, Crevelt failed to support his assertion that “making a wager,” as understood by a person of ordinary skill in art, “means transfer of credits from the credit meter to the bet meter by the game software.” J.A. 443. We find that the district court properly applied *Phillips* when it discounted Crevelt’s declaration.<sup>1</sup>

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<sup>1</sup> In its reply brief, Aristocrat attempts to bolster Crevelt’s declaration by citing, for the first time, a Pennsylvania gambling regulation that describes a gaming machine configured to wager credits:

A slot machine approved for use in a licensed facility must be configured to wager credits available for play in the following order: (1) Noncashable credits. (2) Cashable credits.

58 Pa. Code § 461a.7(x) (2010). This extrinsic evidence of industry-specific usage was not part of the record before the District Court, and Aristocrat cannot raise it for the first time on appeal—let alone in reply. *See, e.g.*,

For the reasons stated above, we agree with the district court that the term “making a wager” should be construed to mean “betting, which is an act performed by the player.”

### B. Direct Infringement

Having construed the disputed claims, we turn to the district court’s grant of summary judgment of noninfringement. This court “reviews the district court’s grant or denial of summary judgment under the law of the regional circuit.” *Bd. of Trs. of Leland Stanford Junior Univ. v. Roche Molecular Sys.*, 583 F.3d 832, 839 (Fed. Cir. 2009), *aff’d*, 131 S. Ct. 2188, 180 L. Ed. 2d 1 (2011) (internal quotation marks omitted)(citation omitted). The Ninth Circuit reviews de novo a district court’s grant or denial of summary judgment. *Humane Soc’y of the US v. Locke*, 626 F.3d 1040, 1047 (9th Cir. 2010).

To establish liability for direct infringement of a claimed method or process under 35 U.S.C. § 271(a), a patentee must prove that each and every step of the method or process was performed. *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir. 2007); *Muniauction*, 532 F.3d 1318. In the recent en banc decision of this court in *Akamai*, we addressed the requirements for infringement under 35 U.S.C. § 271(b) but found that “we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement under 35 U.S.C. § 271(a).” *Akamai*, 692 F.3d at 1307. Thus, “for a party to be liable for direct patent infringement under 35 U.S.C. § 271(a), that party must commit all the acts necessary to infringe the patent, either personally or vicariously.” *Id.* (citing *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1311

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*Conoco, Inc. v. Energy & Envtl. Int’l, L.C.*, 460 F.3d 1349, 1358-59 (Fed. Cir. 2006).

(Fed. Cir. 2005); *Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1565, 1568 (Fed. Cir. 1983)).

For method claims—such as those at issue here—a patent holder must establish that an accused infringer performs “all the steps of the claimed method, either personally or through another acting under his direction or control. Direct infringement has not been extended to cases in which multiple independent parties perform the steps of the method claim.” *Id.* at 1307. We have stated previously that “the control or direction standard is satisfied in situations where the law would traditionally hold the accused direct infringer vicariously liable for the acts committed by another party that are required to complete performance of a claimed method.” *Muniauction*, 532 F.3d at 1330.

Under the claim constructions discussed above, no single actor performs all of the steps of the claimed methods. With respect to the '215 patent, Aristocrat admits that a player, rather than the casino or game operator, performs the step of “activating said user interface at said particular gaming machine by said player during said displaying of said second game to affect the display of said second game.” *See, e.g.*, Appellant’s Br. at 43, 46-7. Similarly, as recited in all the asserted claims, a player, rather than the game operator, “makes a wager.” Thus, to be liable for direct infringement, IGT must exercise direction or control over a player playing the game.

The district court correctly determined that no material issue of fact existed as to IGT’s lack of direction or control over the player. In opposition to IGT’s motion for summary judgment, Aristocrat argued that IGT controls or directs the behavior of players by providing free credits to players to induce them to gamble at IGT’s machines. As the district court found, “[w]hile providing players with free credits might encourage some people to gamble at IGT’s machines, players are not obligated to use their free

credits, nor are players acting on behalf of IGT when they use their free credits on IGT's machines.” Unable to “discern any legal theory under which IGT is vicariously liable for players’ actions as a general matter,” the district court appropriately found no direct infringement. On appeal, Aristocrat contends that “[t]he player’s entire gaming experience is dictated by IGT’s programming of the gaming machine” and that IGT causes the player to make a wager and activate a user interface. Thus, according to Aristocrat, the player’s actions are the “natural, ordinary, and reasonable consequences” of IGT's conduct.<sup>2</sup>

Our case law does not recognize the test that Aristocrat proposes and we decline to so extend it here. As we stated in *Akamai*, “this court has rejected claims of liability for direct infringement of method claims in cases in which several parties have collectively committed the acts necessary to constitute direct infringement, but no single party has committed all of the required acts.” *Akamai*, 692 F.3d at 1307 (citing *BMC*, 498 F.3d at 1381 (“Direct infringement is a strict-liability offense, but it is limited to those who practice each and every element of the claimed invention.”)); *Muniauction*, 532 F.3d at 1329 (same)). One party’s direction or control over another in a

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<sup>2</sup> Aristocrat argues for the first time in reply that the direction and control test is satisfied under the now vacated panel decision in *Akamai* because “the casino is contractually obligated to the player to properly run the game once a wager is made.” Appellant’s Reply Br. at 22 (citing *Akamai*, 629 F.3d at 1319 (“[J]oint infringement occurs when a party is contractually obligated to the accused infringer to perform a method step.”) We find this argument to be untimely raised, see *Carbino v. West*, 168 F.3d 32 (Fed. Cir. 1999), as well as unavailing. Even if we assume a contractual obligation on the part of the casino to pay the player, that would not make the player’s actions those of the casino.

principal-agent relationship or like contractual relationship operates as an exception to this general rule, but absent that agency relationship or joint enterprise, we have declined to find one party vicariously liable for another's actions. *See Akamai*, 692 F.3d at 1307; *Cross Med. Prods.*, 424 F.3d at 1311 (no liability for direct infringement if the party that is directly infringing is not acting as an agent of, or at the direction of, the accused infringer). IGT has no such relationship with the player. Neither is the agent of the other, nor can we discern a theory under which one would be vicariously liable for the other's actions.

Finally, Aristocrat argues that a reasonable jury could find that IGT directly infringes during the testing of its machines because, “even under the district court’s construction requiring ‘legal entitlement,’ the ‘awarding’ step is satisfied when the credits increment on the credit meter indicating that the player is entitled to the amount due.” Appellant’s Reply Br. at 10. Aristocrat cites Crevelt’s declaration for the proposition that IGT’s machines are programmed to “automatically increment the credit meter to include the progressive prize.” *Id.* at 9. Crevelt’s testimony, however, does not speak to whether an IGT employee actually would be entitled to claim any prize that the machine displays. There is no evidence in the record that testers are given the right to use any credits added to the credit meter or claim any prizes won in the course of such use. Because Aristocrat failed to establish a genuine fact dispute regarding the employee’s entitlement to a prize, the district court properly granted summary judgment in IGT’s favor on the issue of infringement during testing.

For these reasons, we affirm the district court’s grant of summary judgment of noninfringement with respect to liability under 35 U.S.C. § 271(a).

### C. Indirect Infringement

Neither the parties, nor the district court in its summary judgment order, expend significant time on the question of indirect or induced infringement. The district court premised its grant of summary judgment of noninfringement on its finding of no direct infringement under our decision in *Muniauction*. Based on our en banc decision in *Akamai*, we must vacate and remand the portion of the order relating to indirect infringement on that basis. As we stated in *Akamai*, “[r]equiring proof that there *has been* direct infringement as a predicate for induced infringement is not the same as requiring proof that a single party would be *liable* as a direct infringer.” *Akamai*, 692 F.3d at 1308-09 (emphasis in original). Thus, “[a] party who knowingly induces others to engage in acts that collectively practice the steps of the patented method—and those others perform those acts—has had precisely the same impact on the patentee as a party who induces the same infringement by a single direct infringer; there is no reason, either in the text of the statute or in the policy underlying it, to treat the two inducers differently.” *Id.* at 1309.

Like the plaintiffs in the cases underlying our en banc decision in *Akamai*, Aristocrat deserves the opportunity to press its indirect infringement theory with the benefit of our clarification regarding inducement. While we express no opinion on the ultimate merits of Aristocrat’s indirect infringement position, the adduced evidence could support a judgment in its favor on a theory of induced infringement. Therefore we vacate and remand the district court’s grant of summary judgment as it relates to indirect infringement.

### D. Alternative Grounds for Noninfringement

IGT argues that we may affirm the district court’s grant of summary judgment of noninfringement, and avoid remand of this case on indirect infringement, on the

basis that the bonus game in the accused machines appears during the main game as opposed to after it. The '215 and '603 patent claims include a limitation requiring the “triggering [of] a second game to appear at said particular gaming machine in response to said occurrence of said second game trigger condition, said second game appearing after completion of said first main game.” '215 patent col. 9 ll. 10-13; '603 patent col. 8 ll. 36-39. The district court, after a motion for reconsideration, construed the term “completion” to mean “after a determination of a winning or losing result on the first main game pursuant to the rules of the first main game.” J.A. 2644.<sup>3</sup> IGT contends that, in the accused machines, the appearance of the Fort Knox bonus game pauses the main game and that the results of the main game are not displayed to the player until after the conclusion of the bonus game. Citing gaming industry regulations, IGT asserts that a game is not “complete” until the credits that have been wagered and won are transferred to a player’s credit meter.

Aristocrat, citing *Trading Technologies International, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1359 (Fed. Cir. 2010), first responds that we review a denial of a summary judgment motion for an abuse of discretion and that, under that standard, we should affirm the district court’s judgment. Aristocrat also contends that it presented substantial expert testimony relating to the source code responsible for triggering the bonus game and that the trigger only occurs upon the completion of the main game. As stated above, we review a district court’s grant or denial of summary judgment under the law of the regional circuit, *Board of Trustees of Leland Stanford Junior University*, 583 F.3d at 839, and the Ninth Circuit reviews both grants and denials of summary judgment de novo.

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<sup>3</sup> Neither party contests the district court’s construction of “completion” on appeal.

*See, e.g., Humane Soc’y*, 626 F.3d at 1047. We see no reason to depart from that general rule here.

Regardless, we agree with Aristocrat that the district court correctly found disputed issues of material fact with respect to the limitation at issue. Nothing in the district court’s construction of the term “completion” references the display of results to the player and we decline to construe the district court’s construction—especially where IGT does not directly appeal that construction—to include that limitation. Nor does our review of the record below or here on appeal reveal a substantive challenge to Aristocrat’s expert testimony regarding the timing and operation of the accused machines. We therefore agree with the district court that a material issue of fact exists as to when the main game completes.

#### CONCLUSION

For the reasons stated above, we affirm the district court’s constructions of “making a wager” and the “awarding step,” affirm the district court’s grant of summary judgment with respect to direct infringement, and vacate and remand the district court’s judgment with respect to indirect infringement.

**AFFIRMED IN PART, VACATED AND REMANDED  
IN PART**