

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TWITCH INTERACTIVE, INC.
Petitioner,

v.

CP STUDIOS LLC
Patent Owner.

Patent No. 11,731,054

Inter Partes Review No. IPR2026-00414

DECLARATION OF HENRY H. HOUH

I, Henry H. Houh, make this declaration in connection with the proceeding identified above.

I. INTRODUCTION

1. I have been retained by counsel for Petitioner Twitch Interactive, Inc. (“Twitch”) as a technical expert in connection with the proceeding identified above. I submit this declaration in support of Twitch’s Petition for *Inter Partes* Review of United States Patent No. 11,731,054 (“the ’054 patent”).

2. I am being compensated at my normal rate, plus reimbursement for expenses, for my analysis. My compensation does not depend on the content of my opinions or the outcome of this proceeding.

II. EXPERIENCE AND QUALIFICATIONS

3. In formulating my opinions, I have relied upon my knowledge, training, and experience in the relevant art. My qualifications are stated more fully in my *curriculum vitae*, which has been provided as Appendix A. Here, I provide a brief summary of my qualifications.

4. I am over the age of 18 and am competent to make this declaration. I have personal knowledge or have developed knowledge of these technologies based upon education, training, or experience, of the matters set forth herein.

5. I worked at BBN Technologies from 2004 to 2009. BBN Technologies, formerly known as Bolt, Beranek and Newman, was a pioneer of the

Internet and a long-established leader in speech recognition and natural language processing. In 2006 or 2007, while I was working at BBN, I created a social networking website, called “GroupOf” that focused on privately sharing content with people within specific circles. A user could upload photographs to the website for sharing, as well as comment on user postings and photographs. The website was purchased by Eons, Inc., a social networking web site company founded by Jeff Taylor who had previously founded Monster.com, the job search site, where I became the Chief Technology Officer. Eons was venture-funded, including investments from CRV (also funded Twitter and Ring), Sequoia Capital (also funded Google, Apple, NVIDIA, and Uber), and General Catalyst (also funded Airbnb and Snap). Eons also featured a section focused on web-based games, and during my time there, I investigated focusing on social-based gaming as a way to deepen our social networking users’ affinity and use of our social networking web site.

6. Around 2013, after founding a kids’ educational maker space, Einstein’s Workshop, we created and developed BlocksCAD, a 3D CAD system for kids and adults which they could use to make 3D models. BlocksCAD is used world-wide and had hundreds of thousands of users. As part of the development of BlocksCAD, we launched a social sharing web site where users could share their 3D models, comment on other’s models, and derive creations from other users’

models. BlocksCAD is being used in maker spaces worldwide and is integrated into school curriculum in various school systems in the U.S. at elementary, middle and high school levels. BlocksCAD was spun out into a separate company that was part of the LearnLaunch business accelerator program for educational technologies, MIT Playlabs 2018 and the 2018 MassChallenge Boston Cohort. BlocksCAD also received Phase 1 SBIR funding.

7. Also, at Einstein's Workshop, we also taught game development for mobile devices, for which I evaluated a number of mobile application programming environments and helped develop the class.

8. My other experience was in the area of networking, computer systems, and distributed applications. In graduate school, my research and work experience was focused on distributed systems, networking, and network architecture and dates back to the 1990s when I was part of the Telemedia, Networks, and Systems group ("TNS") within the Laboratory for Computer Science at MIT. During the early part of my graduate studies, a time when there were perhaps a hundred or so web servers in existence, I set up a web server on one of our lab computers, and created content rich web pages for my research group and my research activities. Eventually, I, together with others I was working with, added live video demonstrations to our research group's web site. The TNS group's web site was one of the first several hundred web servers to exist, and the

first to offer live video demonstrations initiated from the web site to a user's remote computer. I helped to build the web pages that initiated these video sessions via a web interface. I started and maintained the "Commercial Sites Index," a listing of all the companies on the web. I later sold this list to OpenMarket, then a leader in web servers and eCommerce servers.

9. Vice-President Al Gore visited our group in 1996 and received a demonstration of – and remotely drove – a radio controlled toy car with a wireless video camera mounted on it; the video was encoded by TNS-designed hardware, streamed over the TNS-designed network and displayed using TNS-designed software.

10. I authored or co-authored at least twelve papers and conference presentations on my group's research at TNS. I also co-edited TNS's final report on its gigabit networking research effort. Some of my papers about web site development were presented at the first World-Wide Web conference held in 1994 at CERN in Geneva, Switzerland. CERN is the birthplace of the Web, and the conference was chaired by Tim Berners-Lee, the inventor of the World-Wide Web. When Tim Berners-Lee formed the World Wide Web Consortium at the MIT LCS in order to manage the progression of web protocols and standards, I assisted him in obtaining the consortium's domain names and setting up the consortium's web server.

11. From 1999-2004, I was employed by Empirix or its predecessor company, Teradyne. Empirix was a leader in test tools for telecommunications protocols and systems, providing functional testing tools as well as load testing tools.

12. As discussed earlier, I worked at BBN Technologies from 2004 to 2009. BBN received the first contract to build components of a packet switched network as part of the ARPANET, a U.S. Department of Defense effort funded through the Advanced Projects Research Agency (ARPA). While this effort preceded my time at BBN by many years, BBN continued to maintain a strong presence in network research and development, including in wireless networking, device discovery, and protocols for a “body area network.”

13. In 2006, as part of my role at BBN Technologies, I helped found PodZinger Inc., now known as RAMP Inc. PodZinger utilized BBN’s speech recognition algorithms to search through the spoken words inside audio and video. After managing the creation of the initial prototype system, PodZinger built out a full web-based streaming audio and video search solution when I was the Vice President of Operations and Technology there. The web site had a full load-balanced back end that provided search and indexing solutions for our hosted multimedia (audio and video) content.

14. In 2012, I founded Einstein’s Workshop, a science, technology, engineering and math enrichment program for kids of all ages. The Workshop teaches programming, robotics, “making” (akin to creating, building and tinkering), engineering, 3D CAD, mobile application development and many other subjects. Einstein’s Workshop teaches a variety of programming classes from Scratch to Java. As mentioned above, we also taught game development for mobile devices. I also developed a robotics programming class in which robots could be programmed to be autonomous or under direct wireless control.

15. Additional details concerning my professional qualifications, experience, and publications are set forth in my curriculum vitae (“CV”), which is attached as Appendix A.

III. MATERIALS CONSIDERED

16. In preparing this declaration, I have reviewed, among other things, the ’054 patent and file history. I have also considered each of the documents cited in this Declaration and the documents specifically identified below and in the Exhibit List. In formulating my opinions, I have further relied upon my extensive experience in the relevant fields.

IV. OVERVIEW OF THE ’054 PATENT

A. Filing Date and Priority Dates

17. The ’054 patent was filed on October 21, 2020, and issued on August 22, 2023. The ’054 patent claims earliest priority to a U.S. provisional application

filed on May 7, 2012, which I am informed that the Petitioner treats as the earliest effective filing date only for purposes of this proceeding.

B. Specification

18. The '054 specification describes well-known ways to integrate social networking with video games at the time. (*Infra* §IX.A.) It broadly describes “video gaming applications,” which “may be hosted or accessed via social networks, other third-party services or on third-party servers, stand-alone platforms, tablets, smartphones or the like.” (EX1001, Title, 2:42-45.) A player of a video gaming application can post a *gameplay activity* on a *social network*. As shown in FIG. 22A, a player (“Corey Smith”) of an “aviation video gaming application” has posted a *gameplay activity* (“Corey is visiting Jordan’s Airport”) on a *social network*.¹ (*Id.*, 17:31-33.)

¹ Emphases and/or annotations added unless specified.

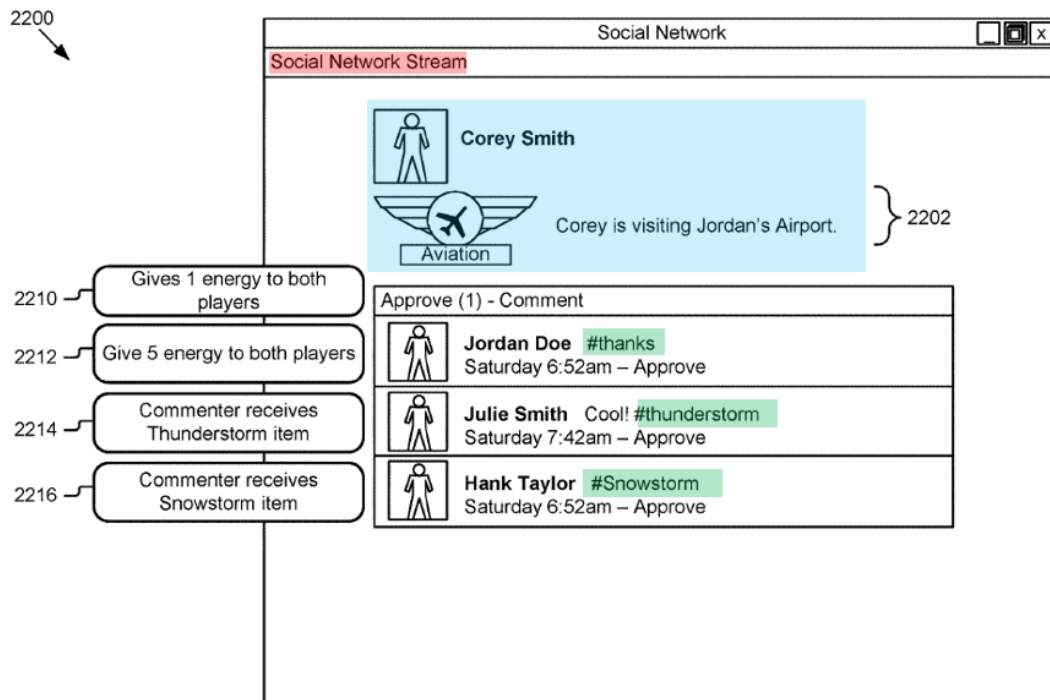


Figure 22A

19. The '054 specification describes that social network users can use commonplace ways to “interact” with the post, for example, by *clicking* or *commenting* on the post. (EX1001, 27:9-10.) A “player who *clicked* ‘like’ receives . . . [e]nergy points.” (*Id.*, 18:40-42.) Further, users can *comment* on the post to provide “keyword-based participation.” (EX1001, 27:10.) In FIG. 22A, for a comment “*#thanks*” by another player of the game (Jordan Doe), “five energy points are given to both players” in the game. (*Id.*, 21:17-19.) For a comment “*#thunderstorm*” from another player of the game (Julie Smith), “the commenter receives a thunderstorm item (in-game item).” (*Id.*, 21:19-21.)

20. Alternatively, if the commenter is not a player of the game, for a comment “*#thanks*,” “two energy points are given to the player (i.e., poster).” (EX1001, 21:32-33.) For a comment “*#thunderstorm*,” “the player’s (i.e., poster) airport is hit by a thunderstorm.” (*Id.*, 21:34-35.)

21. FIG. 12 illustrates a workflow of the aviation game. A player “perform[s] an action within the game” in block 1204 and “post[s] a *description of the action* in a *social network feed*.” (EX1001, 17:13.) The player may “*receive one or more rewards* based on events from the social network feed and/or player *interactions*.” (*Id.*, 17:15-17.)

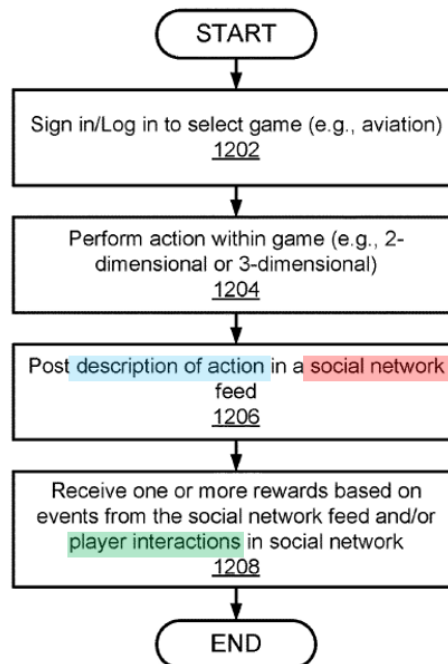


Figure 12

C. Claims

22. I was asked to evaluate whether claims 1-20 of the '054 patent are patentable.

23. There are two independent claims. Claim 1 is directed to a computer-implemented method using a plurality of computing devices in a cloud computing network. The computer-implemented method comprises: (1) providing access to a video gaming application operated in the cloud computing network to the plurality of computing devices; (2) enabling a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network, the first computing device participating in the first gameplay via a first gaming platform; (3) enabling a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network, the second computing device participating in the second gameplay via a second gaming platform; (4) receiving one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application; (5) determining an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service; and (6)

modifying one of the first gameplay and the second gameplay of the video gaming application based on the influence.

24. Claim 14 is directed to a system for hosting and providing a video gaming environment to one or more users. The system comprises one or more processors and a memory. The memory stores instructions that, when executed by the one or more processors, cause the system to: (1) provide access to the video gaming application operated in a cloud computing network to a plurality of computing devices; (2) enable a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network, the first computing device participating in the first gameplay via a first gaming platform; (3) enable a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network, the second computing device participating in the second gameplay via a second gaming platform; (4) receive one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application, and (5) determine an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service; and (6)

modify one of the first gameplay and the second gameplay of the video gaming application based on the influence.

25. There are 18 dependent claims. Claims 2-13 depend from claim 1. Claims 15-20 depend from claim 14.

26. Claim 2 requires that the gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.

27. Claim 3 requires that the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and wherein the first computing device is a personal computer and the second computing device is a mobile device.

28. Claim 4 requires that the first player and the second player have different levels of capability in the shared gameplay.

29. Claim 5 requires that the first gameplay and the second gameplay are a shared game played by a same player via different platforms.

30. Claim 6 requires that the first gameplay and the second gameplay are different games played by different players via a same gaming platform.

31. Claim 7 requires that the first gameplay and the second gameplay are different games played by different players via a different gaming platform.

32. Claim 8 requires that game content in the first gameplay and the second gameplay is platform agnostic.

33. Claim 9 requires that the video gaming application is linked with the social network service that enables users of the video gaming application to send text-based posts.

34. Claim 10 requires that the video gaming application is linked with the social network service to enable text-based posts to be broadcasted for the event from one of the first gameplay and the second gameplay.

35. Claim 11 requires that the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.

36. Claim 12 requires that the social network application is included in the video gaming application.

37. Claim 13 requires that the social network application is a stand-alone third-party application coupled to the video gaming application.

38. Claim 15 requires that a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.

39. Claim 16 requires that the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and wherein

the first computing device is a personal computer and the second computing device is a mobile device.

40. Claim 17 requires that the first player and the second player have different levels of capability in the shared gameplay.

41. Claim 18 requires that the first gameplay and the second gameplay are a same game played by a same player via different platforms.

42. Claim 19 requires that game content in the first gameplay and the second gameplay is platform agnostic.

43. Claim 20 requires that the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.

D. Prosecution History

44. The application that matured into the '054 Patent was filed on October 21, 2020. (EX1001, 1.) Examination was perfunctory. The Examiner issued only two Office Actions, and both relied on the same single reference. (EX1003, 159-161, 206-209.) In the first Office Action response, Applicant added a limitation to claim 1 and argued that the added limitation was not taught. (*Id.*, 181-189.) After the Examiner maintained his rejections in the second Office Action, Applicant changed course—removing the added limitation and instead adding claim elements 1[D]-[F] to claim 1. (EX1003, 182, 219.)

45. The Examiner then allowed the application. (*Id.*, 241.) However, Examiner cited as his reasons for allowance that he found “no teaching or suggestion” of “allow[ing] a user to post at least one *comment* to the social network” and “determin[ing] if the at least one comment includes one or more *keywords*” in the Notice of Allowance. (*Id.*, 246.) None of the claims recite “comment” or “keywords”; they recite a broader term—“interaction”—instead.

46. In fact, by the time of the invention, social-network “interactions,” such as *clicks*, *comments*, *views*, and *likes*, on Facebook or Twitter, were already routine and ubiquitous. Likewise, video games that were updated or modified based on such interactions were well-known in the art, as explained herein. Yet despite the subject matter, the Examiner never cited or raised *any* contemporaneous game publications during prosecution.

V. RELEVANT LEGAL STANDARDS AND DEFINITIONS

A. Obviousness

47. I have been informed that a claim is unpatentable if the differences between the claimed subject matter and the prior art are such that the subject matter as a whole would have been obvious at the time the claimed subject matter was made to POSITA to which the subject matter pertains. I have also been informed that a patent claim may be obvious to a POSITA in view of the prior art teachings of a single reference or a combination of references.

48. To assess obviousness, I have been informed that I am to consider the scope and content of the prior art, the differences between the prior art and the claim, the level of ordinary skill in the art, and any secondary considerations to the extent that they exist.

49. I have also been informed that there are principles that may be used as further guidance in obviousness analysis (especially when considering combinations of references), which include considering whether:

the claimed subject matter is simply a combination of prior art elements according to known methods to yield predictable results;

the claimed subject matter is a simple substitution of one known element for another to obtain predictable results;

the claimed subject matter uses known techniques to improve similar devices or methods in the same way;

the claimed subject matter applies a known technique to a known device or method that is ready for improvement to yield predictable results;

the claimed subject matter would have been “obvious to try” choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

there is known work in one field of endeavor that may prompt variations of it for use in either the same field or a different one based on design

incentives or other market forces if the variations would have been predictable to a POSITA;

there existed at the time of conception and reduction to practice a known problem for which there was an obvious solution encompassed by the patent's claims; and

there is some teaching, suggestion, or motivation in the prior art that would have led a POSITA to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed subject matter.

50. I have been informed that there are secondary considerations that may tend to show that a claimed invention would not have been obvious to a POSITA. These include, for example, commercial success, long-felt but unsolved needs, failure of others, and unexpected results. I have been further informed that there must be a relationship, or nexus, between any secondary considerations and the novelty of the claimed invention.

B. Prior Art

51. I am informed and understand that prior art includes patents and printed publications that existed before the effective filing date of the claimed invention. The effective filing date is the earliest claimed priority date or the earliest filing date of the application that describes the subject matter. A patent or published patent application is prior art if it was filed before the earliest filing date

of the claimed invention, absent a few exceptions. I am informed that a patent or published patent application is entitled to have its effective filing date as the filing date of its provisional application if the disclosure of the provisional application provides support for the claim(s) of the patent or published patent application.

VI. LEVEL OF ORDINARY SKILL IN THE ART FOR THE '054 PATENT

52. I am informed and understand that various factors can be considered in determining a person of ordinary skill in the art (POSITA). I am informed and understand that those factors include: (1) the education level of the inventors; (2) the type of problems encountered in the art; (3) prior art solutions to those problems; (4) the rapidity with which innovations are made; (5) sophistication of the technology; and (6) education level of active workers in the field.

53. A POSITA in the field of the '054 patent would have a bachelor or graduate degree in electrical engineering, computer engineering, computer science, or equivalent field, and two years of experience working on video games and/or social networking. A graduate degree in the disciplines cited above may make up for the work experience indicated above.

54. I agree with this level of ordinary skill for the '054 patent. Based on my experience, as described above and in Appendix A, I meet the definition of the qualifications of a POSITA, now and as of the alleged priority date. For purposes of this declaration, in general, and unless otherwise noted, my statements and

opinions, such as those regarding my own experience, what a POSITA would have understood or known generally (and specifically related to the references I consulted herein), and how a POSITA would have understood and used the terminology found in the '054 patent, reflect the knowledge that existed in the relevant field at the time the '054 patent priority application was filed, and with the state of the art at that time.

VII. CLAIM CONSTRUCTION

55. I have been informed that claim construction requires consideration of the words of the claims themselves, the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art. I have also been informed that the specification is usually definitive, as it was the single best guide to the meaning of a disputed term. I have been informed that claim terms are presumed to carry their ordinary and customary meaning as understood by a POSITA at the time of the purported invention. I have been informed that, in the context of this proceeding, which requires the Board to construe the terms only to the extent necessary to resolve the issue at hand—unpatentability of the claims under 35 U.S.C. §103, Petitioner believes the Board need not construe any of the claims because, as set forth in the Declaration and Petition, the claims are unpatentable under 35 U.S.C.

§103 under any reasonable interpretation, and thus, no claim construction is necessary to resolve any issue before the Board.

VIII. PRIOR ART

56. I understand that each of the references discussed herein qualifies as prior art against the '054 patent:

57. “FarmVille For Dummies” (the “FarmVille,” EX1004) was published by Wiley Publishing, by at least March 25, 2011. (*See* EX1021, 1.)

58. “Kickstarter Project – Tweet Land: Playing With Reality” (the “Tweet Land,” EX1005) was published by at least October 10, 2011. (*See* EX1024, 1-2, 9-10.)

59. “Be Our Guest; Buy Our ROBUX” (“Shedletsky,” EX1009) was published by at least March 5, 2012. (*See* EX1024, 1-2, 52-53.)

60. U.S. Patent No. 8,790,182 (“Zynga patent,” EX1008) was filed on September 26, 2011.

61. U.S. Patent No. 8,671,019 (“Barclay '019,” EX1006) was filed on March 2, 2012.

62. U.S. Patent Publication No. 2012/0184363 (“Barclay '363,” EX1007) was filed on March 29, 2012.

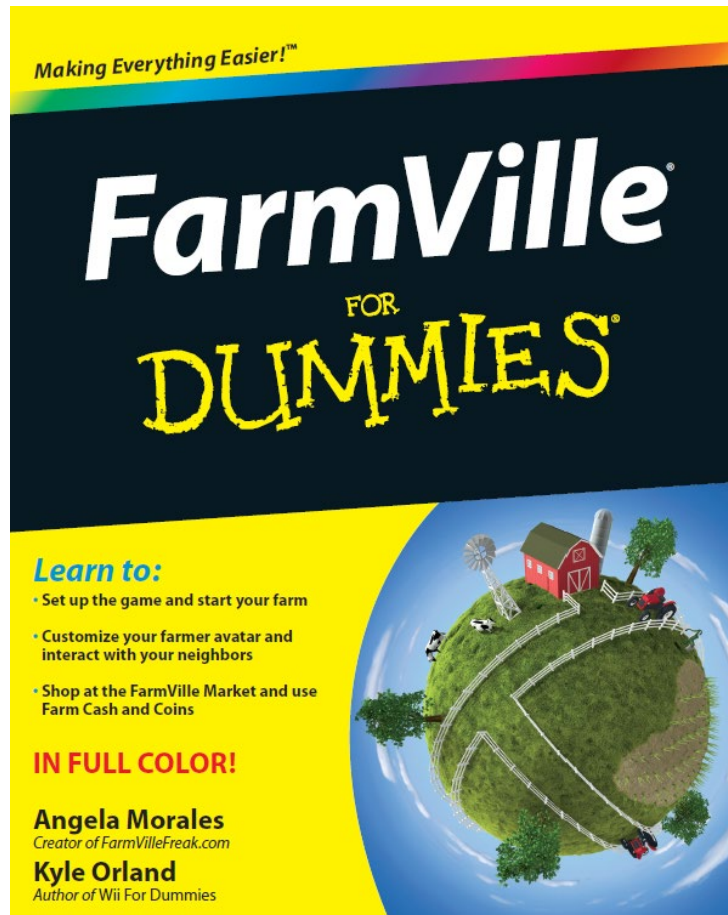
IX. ANALYSIS AND OPINIONS

A. Ground 1: FarmVille Renders Obvious Claims 1-20

1. Summary of FarmVille

63. FarmVille was published/made publicly available at least by March 25, 2011, before the earliest provisional application filing date of the '054 patent, and thus qualifies as prior art under §102(a) and (b). (*See* EX1021, 1.) The Examiner never found, and Applicant never cited, FarmVille during prosecution.

64. FarmVille is a 268-page guide to the FarmVille game, “the most popular Facebook application created to date.” (EX1004, 1.) FarmVille had “more than 50 million active players” by 2011. (*Id.*)

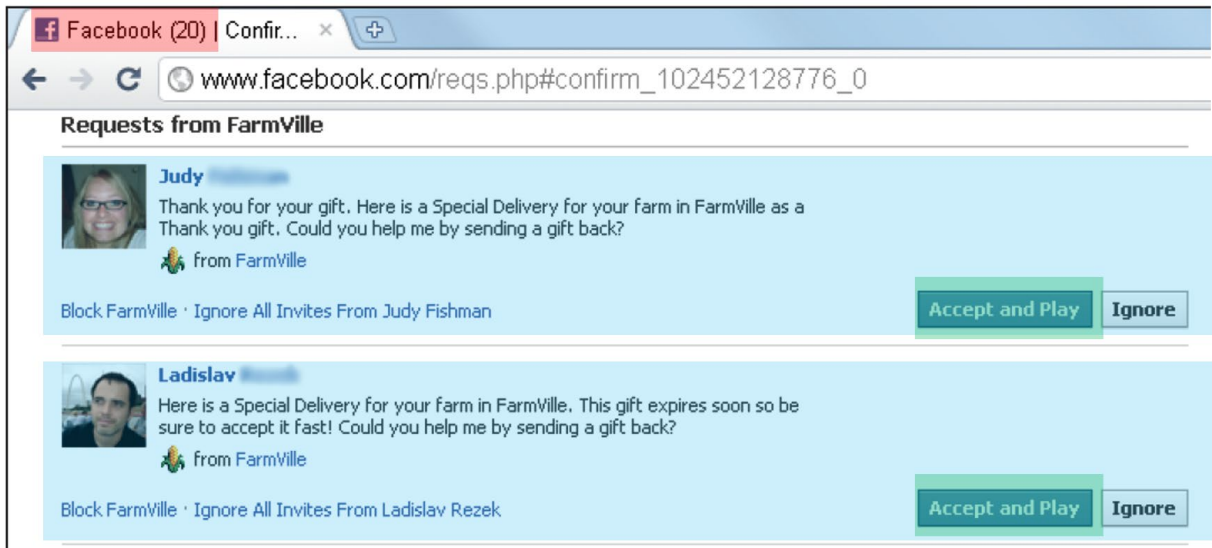


(EX1004, Cover.)

65. The FarmVille game operates on FarmVille servers. “This farm, and the game itself, aren’t actually stored permanently on your computer, but exist on ‘the cloud’ of FarmVille servers maintained by developer Zynga.” (EX1004, 11.) The game can be accessed via a web browser (*e.g.*, Facebook.com or FarmVille.com) or via a mobile app. (*Id.*, 16, 7, 24, 26.)

66. FarmVille players can post FarmVille-related *events* on their Facebook newsfeed: “news posts can involve everything from *opportunities to adopt animals or accept free items to requests for help with building upgrades.*” (EX1004, 70, 66; *see also id.*, 46, 54-55, 70-71, 149-150, 155-156, 206; EX1017, 1-2; EX1016, 70, 142.) FarmVille “takes advantage of Facebook’s social networking framework to encourage interaction with other players.” (*Id.*, 9.)

67. In particular, Facebook users’ *interactions* with those FarmVille *events* via *Facebook* would modify FarmVille’s gameplay. In a first example (*i.e.*, accepting gifts), a Facebook user can review a post and “[c]lick the Accept and Play button next to the gift [they] want to accept.” (EX1004, 67, Figure 3-4.) After acceptance, the user’s Gift Box is updated. (*Id.*, 67-68.)



(Excerpt from EX1004, Figure 3-4)

68. In a second example (*i.e.*, accepting items or bonuses), a Facebook user “will be able to **click** the link that appears in **their news feed** to accept the item or bonus or provide help with your request.” (EX1004, 71, Figure 8-5.) “Coins and experience points are added to [the] FarmVille account.” (*Id.*, 149.)



Figure 8-5: A bonus XP link as seen in a FarmVille news feed.

(EX1004, Figure 8-5)

69. In a third example (*i.e.*, adopting animals), “if you see a lost animal on your friend’s news feed, you can **click** the link to adopt it for your farm. (It will appear in your Gift Box.)” (EX1004, 46, Figure 3-9.) The adopted animal “will appear in your Gift Box.” (*Id.*, 46.)



Figure 3-9: A lost animal shared via a friend’s Facebook newsfeed.

(EX1004, Figure 3-9)

70. In a fourth example (*i.e.*, barn raising), “[t]en of your neighbors need to **click** the link in this news post over the next three days to complete your barn raising and expand your building’s storage.” (EX1004, 156.)

71. In a fifth example (*i.e.*, accepting an invitation to play FarmVille), a Facebook user can review a post on the **Facebook news feed** and “**click** the Accept and Play button.” (EX1004, 56.) Then, the non-player Facebook user “[is] asked to install the game and set up their farm.” (*Id.*)

72. In a sixth example (*i.e.*, accepting neighbor requests), a Facebook user can “*click* the Accept and Play button on the *news feed* post you sent before he or she officially becomes your neighbor.” (EX1004, 55.)

73. In a seventh example (*i.e.*, joining co-op jobs), “neighbors can *click* a link that automatically appears in the *news feed* post to join your *co-op job*.” (EX1004, 206, Figure 12-5.)

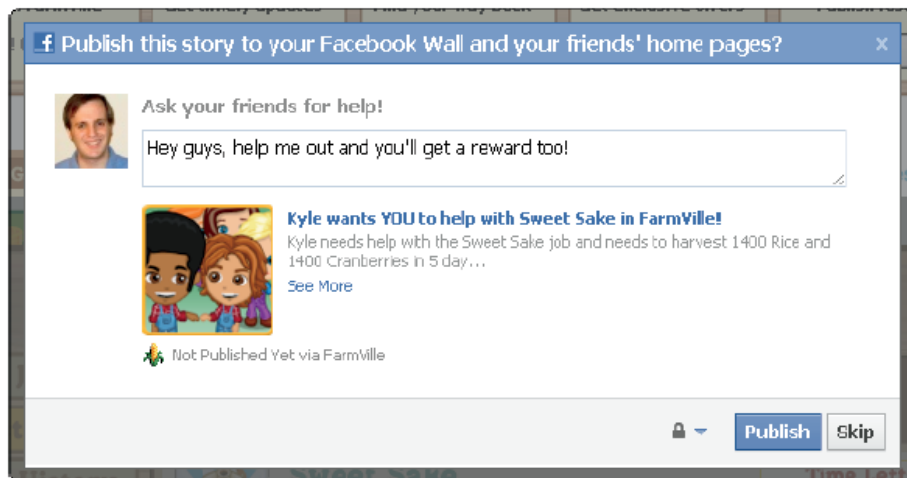


Figure 12-5: Posting a note about your co-op job to the Facebook news feed.

(EX1004, Figure 12-5)

74. The FarmVille servers receive the player’s interaction data (*e.g.*, clicks) and determine an influence to the game based on certain rules. For example, “some items shared via news feeds are available for only a limited time, or are available only to the first few neighbors who click the link” (EX1004, 71); “only the first person to click each news feed link can adopt the animal in

question” (*id.*, 46); and “[t]en of your neighbors need to click the link in this news post over the next three days to complete your barn raising and expand your building’s storage” (*id.*, 156).

2. Claim 1

a. 1[PR]: “A computer-implemented method using a plurality of computing devices in a cloud computing network, the method comprising:”

75. To the extent limiting, FarmVille discloses the preamble.

76. First, FarmVille discloses a plurality of computing devices, such as FarmVille player’s computers and mobile devices, etc. To play FarmVille, “a user can employ practically *any computer with an Internet connection* and a graphical Web browser[.]” (EX1004, 16, 7.) “Using a computer with Internet access is the easiest way to play FarmVille and practically any computer that can handle a graphical Web browser can handle the game.” (EX1004, 15.) Further, “[i]n June 2010, Zynga launched the first mobile FarmVille app for the *iPhone, iPod Touch, and iPad*. The FarmVille app offers access to the same farm you maintain on Facebook.com or FarmVille.com[.]” (EX1004, 26, *see also id.*, 15, (“Don’t have a computer? That’s okay; you can now play FarmVille on *Apple iOS devices, including the iPhone.*”).) FarmVille also discloses that “[w]ith a *laptop or mobile device*, FarmVille can even help fill those wasted wait times that can seem to fill up a day.” (EX1004, 8.)

77. Second, FarmVille discloses that the plurality of computing devices operate in a cloud computing network. Specifically, FarmVille players' computing devices communicate with FarmVille servers in the cloud to access the game.

"FarmVille is a **Web-based** farming simulation game produced by a gaming company called Zynga. In contrast to many computer games that you have to buy on a disc, anyone with an **Internet connection** and a Facebook account can load FarmVille in his or her Web browser and play for free in an instant. The ease of access is one of the reasons FarmVille has become so popular." (EX1004, 7.)

"Signing up to play FarmVille is completely free, so anyone with Internet access is a potential neighbor." (*Id.*, 53.) "FarmVille is a Web-based game that you can play without inserting a disc or installing any programs to your hard drive. Your farm and the game program required to maintain it exist as part of a series of **online data centers** maintained by FarmVille's publisher, Zynga." (*Id.*, 16.) "This farm, and the game itself, aren't actually stored permanently on your computer, but exist on 'the cloud' of **FarmVille servers** maintained by developer Zynga." (*Id.*, 11.) "To play FarmVille, you need to make sure that your browser has JavaScript enabled. JavaScript lets your browser talk to the **FarmVille servers** and keep the farm that you see on your screen synced with the version stored in the **Internet 'cloud' of online servers.**" (*Id.*, 17; *see also id.* at 32 ("[c]licking Play while you're already on your farm refreshes your page with the latest version from

Zynga's servers, but you need to refresh your page only if your connection falls out of sync for some reason”), 62 (“some items on the neighbor’s farm may appear as shadows for a while, only to pop suddenly into existence as the data is downloaded from *Zynga’s server*”), 225-229.) A POSITA would understand that FarmVille players’ computers and the FarmVille servers form parts of a cloud computing network.

78. FarmVille can be accessed via a web browser, for example, by visiting FarmVille.com, as shown below. (EX1004, 24.)

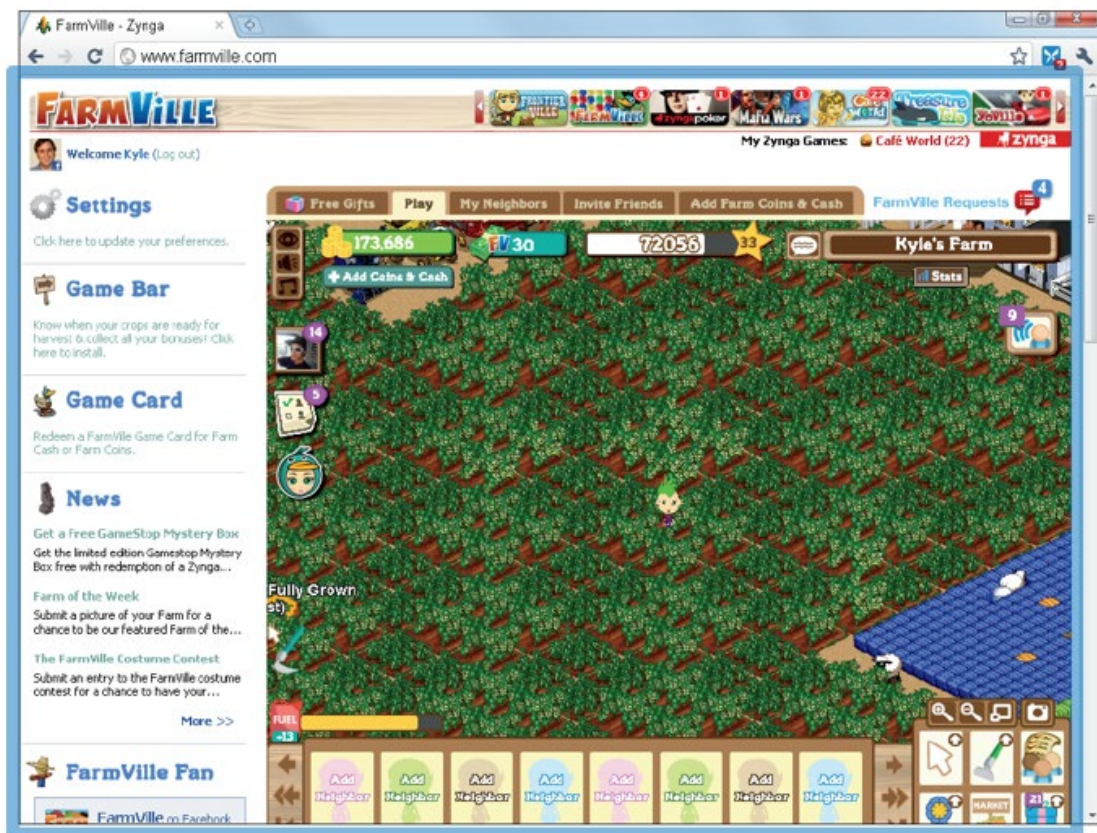


Figure 2-4: Playing FarmVille through FarmVille.com.

(EX1004, Figure 2-4)

79. FarmVille can also be accessed on Facebook (e.g., via a browser), as shown below. (EX1004, 24.)

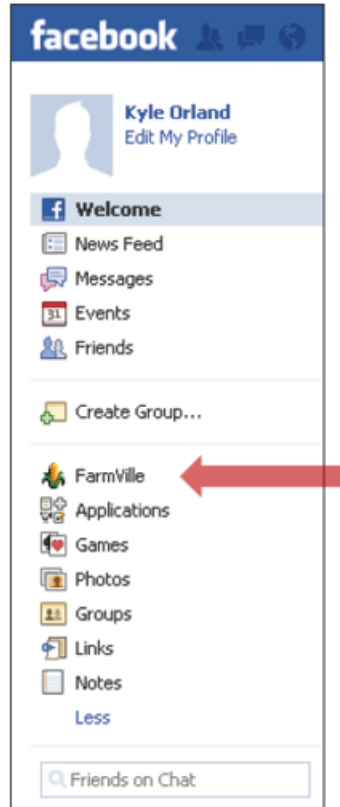


Figure 2-3: How the FarmVille bookmark appears on your Facebook sidebar.

(EX1004, Figure 2-3)

80. A POSITA would have understood that FarmVille discloses a “computer-implemented method” because providing the FarmVille gaming application involves a method implemented by computers such as “FarmVille servers” and user computers. (EX1004, 15, 26.)

b. 1[A]: “providing access to a video gaming application operated in the cloud computing network to the plurality of computing devices;”

81. FarmVille discloses this element.

82. First, FarmVille discloses providing access to a *video gaming application*. FarmVille is “the most popular Facebook *application* created to date.” (EX1004, 1.) “FarmVille is a Web-based farming simulation *game* produced by a gaming company called Zynga.” (*Id.*, 7.) The game includes “interactive and animated content” and thus is a video game. (*Id.*, 17.) “The basic concept of FarmVille is relatively simple. You manage your virtual farm by planting, growing, and harvesting virtual crops; tending livestock and trees; constructing buildings such as barns and chicken coops; and buying and selling goods made on the farm.” (*Id.*, 7, 11-12.) A screenshot of FarmVille’s *video gaming application* is shown below, accessible via Farmville.com. (*Id.*, 24.)

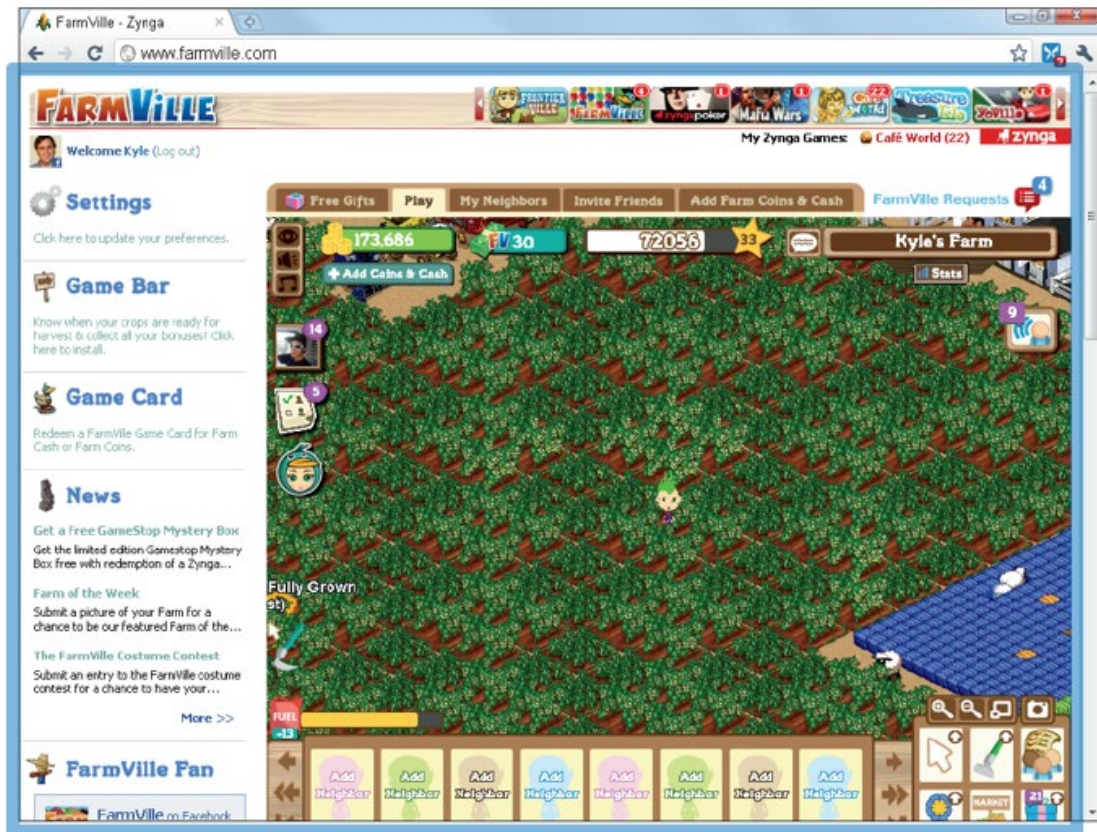


Figure 2-4: Playing FarmVille through FarmVille.com.

(EX1004, Figure 2-4)

83. The FarmVille game can be accessed via a web browser. “[A] user can employ practically any computer with an Internet connection and a graphical Web browser to play FarmVille.” (EX1004, 16, 7.) Specifically, FarmVille can be accessed on Facebook, as shown below. (*Id.*, 24.) The FarmVille app is a *video gaming application*.

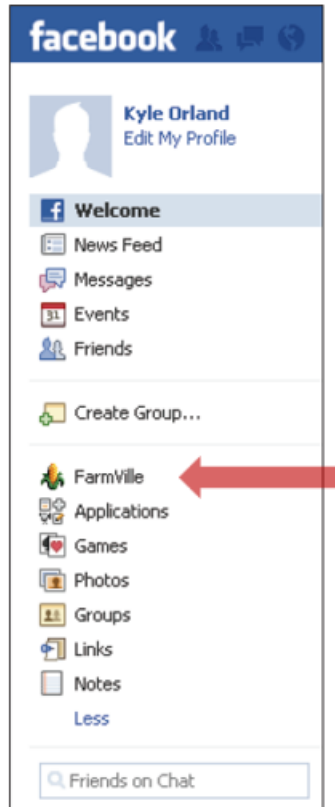


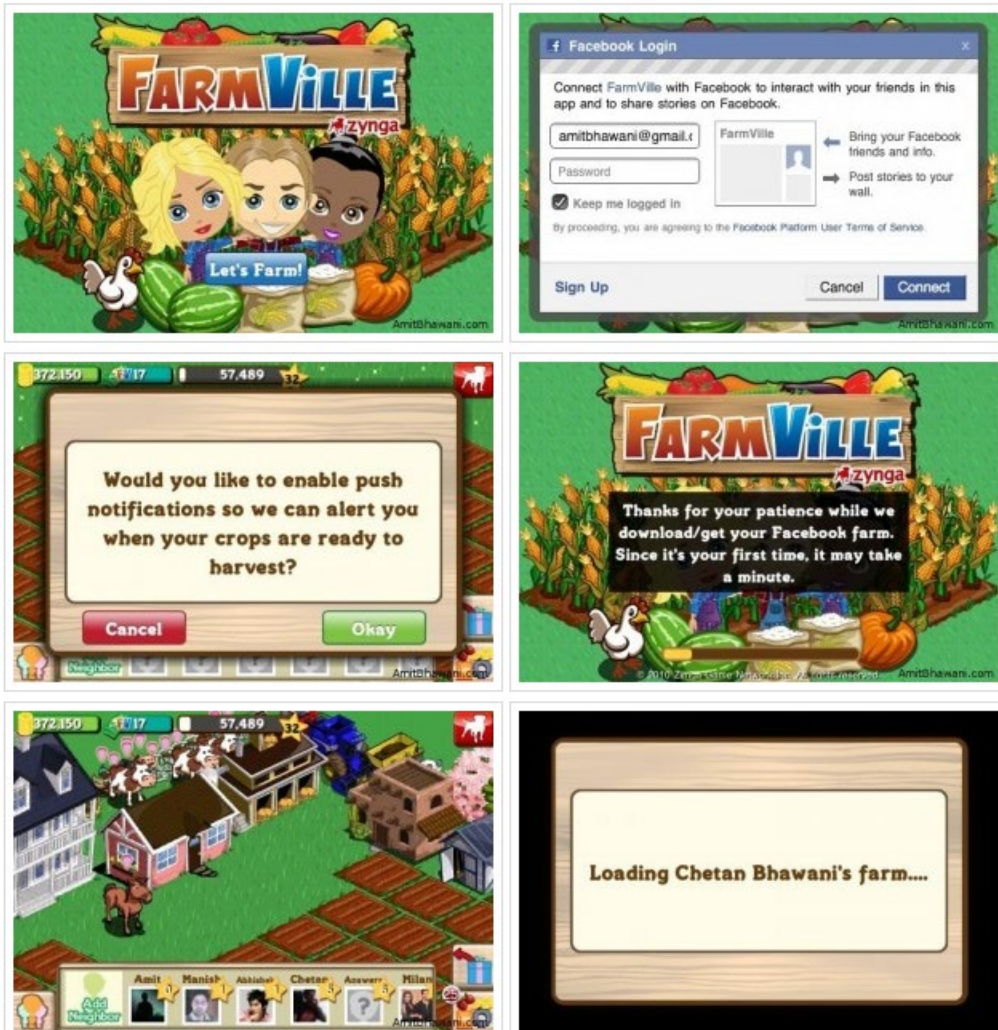
Figure 2-3: How the FarmVille bookmark appears on your Facebook sidebar.

(EX1004, Figure 2-3)

84. FarmVille’s *video gaming application* can also be a mobile app. “In June 2010, Zynga launched the first *mobile FarmVille app* for the iPhone, iPod Touch, and iPad. The FarmVille app offers access to the same farm you maintain on Facebook.com or FarmVille.com[.]” (EX1004, 26.) By 2012, it was known that the FarmVille game can be downloaded from the iPhone’s App Store and played on an iPhone. For example, after downloading, “it will be asking you to

login with your Facebook account to get access to your farm[,]” “[n]ext you would be asked if you would like to get Push Notifications when your crops grow[,]” and then the game will load and provide you with access to the farm. (EX1012, 1-2, Photos.)

Game Photos :



(EX1012)

85. Second, FarmVille discloses that the *video gaming application* operates in the *cloud computing network*. FarmVille’s *video gaming application* operates in *FarmVille servers*, which is part of the *cloud computing network*. “FarmVille is a Web-based game that you can play without inserting a disc or installing any programs to your hard drive. Your farm and the game program required to maintain it exist as part of a series of *online data centers* maintained by FarmVille’s publisher, Zynga.” (EX1004, 16.) “This farm, and the *game* itself, aren’t actually stored permanently on your computer, but exist on ‘the cloud’ of *FarmVille servers* maintained by developer Zynga.” (*Id.*, 11.) “To play FarmVille, you need to make sure that your browser has JavaScript enabled. JavaScript lets your browser talk to the *FarmVille servers* and keep the farm that you see on your screen synced with the version stored in the *Internet ‘cloud’ of online servers*.” (*Id.*, 17; *see also id.* at 32 (“[c]licking Play while you’re already on your farm refreshes your page with the latest version from *Zynga’s servers*, but you need to refresh your page only if your connection falls out of sync for some reason”), 62 (“some items on the neighbor’s farm may appear as shadows for a while, only to pop suddenly into existence as the data is downloaded from *Zynga’s server*”), 225-229.)

86. Third, FarmVille provides access to the *video gaming application* to the plurality of *computing devices* of FarmVille players. “Surely there has to be

some common factor that makes FarmVille appealing to so many *millions*. Maybe deep down inside, we all want to be farmers. Perhaps we're intrigued by farming's Zen-like simplicity. Or could it be some innate desire to own land and return to days of simple, natural living? Whatever the case, FarmVille is attracting people from all walks of life. The virtual farmers of FarmVille represent a broad range of backgrounds and professions. Business professionals, stay-at-home moms, doctors, the unemployed, stockbrokers, technology gurus, college students, and retirees are living second lives as diligent Internet farmers." (EX1004, 8.) For example, "[u]sing a *computer* with Internet access is the easiest way to play FarmVille and practically any *computer* that can handle a graphical Web browser can handle the game." (*Id.*, 15.) Thus, access to FarmVille's *video gaming application* is provided by the "*FarmVille servers*" to the devices of "millions" of users.

c. 1[B][1]: "enabling a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network,"

87. Farmville discloses this element.

88. FarmVille enables a FarmVille player's computing device (*i.e.*, first computing device of the plurality of computing devices) to participate in a gameplay. "[A]nyone with an Internet connection and a Facebook account can load FarmVille in his or her Web browser and play for free in an instant . . . The basic concept of FarmVille is relatively simple. You manage your virtual farm by planting, growing,

and harvesting virtual crops; tending livestock and trees; constructing buildings such as barns and chicken coops; and buying and selling goods made on the farm. By completing these tasks, you earn coins that you can spend to expand and upgrade your farm. You also gain experience points, which go toward earning new levels, new items, and new gameplay opportunities on your farm. Through weeks and months of dedicated farming, you can build your initial small, empty farm into a massive, thriving mega-farm bustling with life.” (EX1004, 7.) “Using a *computer* with Internet access is the easiest way to play FarmVille and practically any *computer* that can handle a graphical Web browser can handle the game.” (*Id.*, 15.) The first computing device can also be a mobile device. (*Id.*, 26.)

89. As discussed above, the FarmVille player’s device participates in a gameplay of the video gaming application (*e.g.*, FarmVille app) via the cloud computing network. (*Supra* §§IX.A.2.a-IX.A.2.b.)

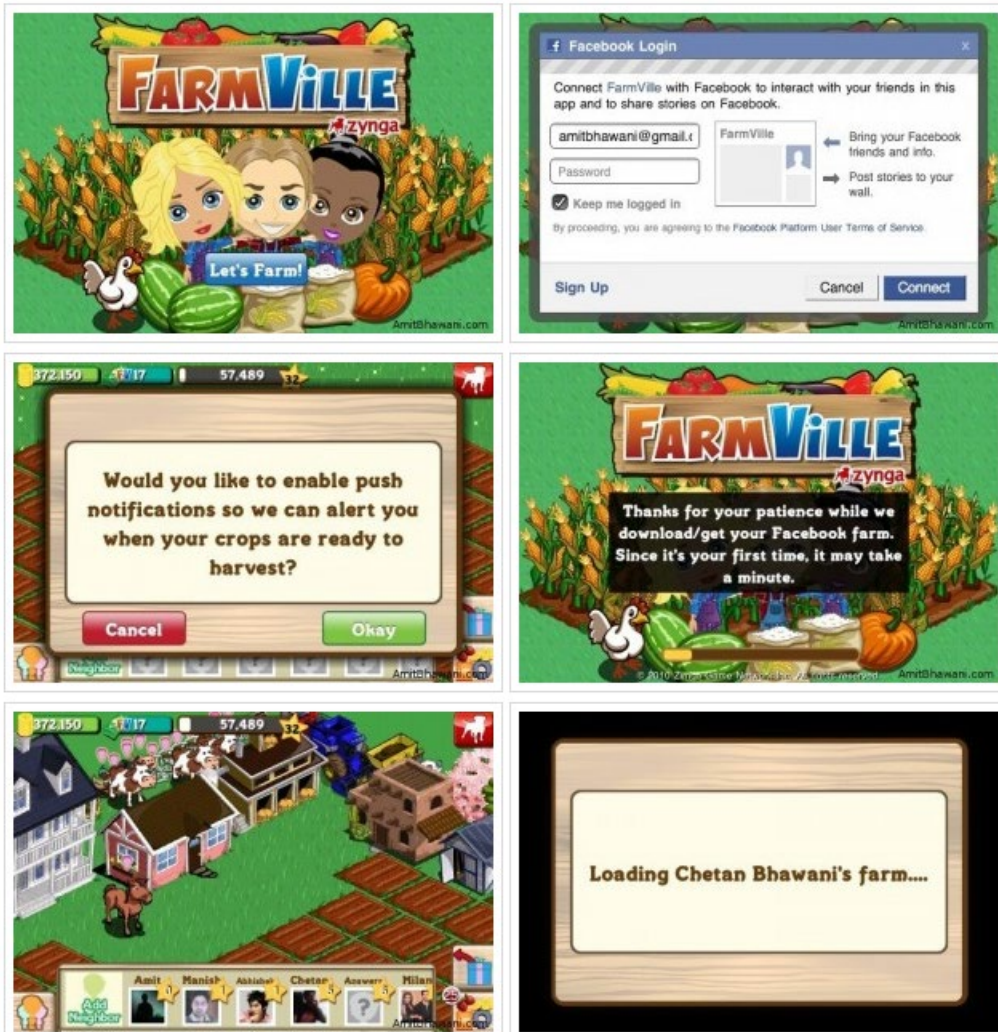
d. 1[B][2]: “the first computing device participating in the first gameplay via a first gaming platform;”

90. Farmville discloses this element.

91. Claim 2 of the ’054 patent states that “a *gaming platform* is one of a mobile device, a game console, a social network messaging application, and a social website.” (EX1001, 29:27-29.) Farmville discloses many of these gaming platforms because the Farmville game is made available to players and enables players to play the game on these.

92. FarmVille discloses a gaming platform that is a mobile device providing gameplay via the FarmVille mobile app. “In June 2010, Zynga launched the first mobile FarmVille app for the *iPhone, iPod Touch, and iPad*. The FarmVille app offers access to the same farm you maintain on Facebook.com or FarmVille.com[.]” (EX1004, 26, *see also id.*, 15, (“Don’t have a computer? That’s okay; you can now play FarmVille on *Apple iOS devices, including the iPhone.*”).) By 2012, it was known that the FarmVille game can be downloaded from the iPhone’s App Store and played on an iPhone. For example, after downloading, “it will be asking you to login with your Facebook account to get access to your farm,” “[n]ext you would be asked if you would like to get Push Notifications when your crops grow,” and then the game will load and provide you with access to the farm. (EX1012, 1-2, Photos.)

Game Photos :



(EX1012)

93. FarmVille also discloses a gaming platform that is a social website or a social network messaging application. FarmVille can be accessed on **Facebook**, as shown below. (*Id.*, 24.) FarmVille players can “access the FarmVille app through a Facebook search, an invitation from a Facebook friend, or the game's public-facing Facebook page[.]” (EX1004, 22.) A POSITA would understand that Facebook is a social website because it allows users to build relationships and stay

connected with their social contacts. A POSITA would also understand that Facebook is also a social network messaging application because it provides mechanisms for users to message each other. (*See* EX1025.) Facebook (as a social website or a social networking application) is a gaming platform because it offers access to and the playing of the game.²

² In this proceeding, everything mapped to a “gaming platform” (*e.g.*, Facebook, mobile device) is done so because they provide the actual game(s) and allow for gameplay.

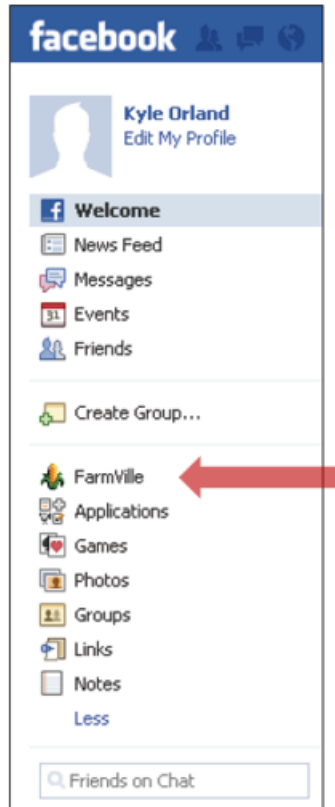


Figure 2-3: How the FarmVille bookmark appears on your Facebook sidebar.

(EX1004, Figure 2-3)

94. FarmVille also discloses a gaming platform that is a dedicated website. “If you don’t want to go through the Facebook home page every time you play FarmVille, you can also access the game directly through the FarmVille Web site at <http://www.farmville.com>, as shown in Figure 2-4. The game is almost *exactly the same in both Web locations* — in fact, the same farm you maintain on Facebook is accessible on FarmVille.com, and vice versa.” (EX1004, 24.) It is a

gaming platform because it offers the game and allows the gameplay on that platform.

95. Thus, FarmVille discloses that a FarmVille player's computing device (*i.e.*, the first computing device) participates in a gameplay (*i.e.*, first gameplay) via a gaming platform (*e.g.*, Facebook website providing access to/play of the game, mobile app, FarmVille.com).

e. 1[C][1]: “enabling a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network,”

96. Farmville discloses this element.

97. The dependent claims of the '054 patent broadly state that the “first gameplay” and the “second gameplay” can be “shared gameplay” or “different games,” and that they can be played by the “same player” or “different players.” (EX1001, Claims 3, 5-8.)

98. FarmVille discloses all of these.

99. First, FarmVille discloses the first gameplay being a FarmVille player's gameplay on his own farm and a second gameplay being another FarmVille player's gameplay (*e.g.*, on the same farm or his own farm). “The basic concept of FarmVille is relatively simple. You manage *your virtual farm* by planting, growing, and harvesting virtual crops; tending livestock and trees; constructing buildings such as barns and chicken coops; and buying and selling

goods made on the farm. By completing these tasks, you earn coins that you can spend to expand and upgrade your farm. You also gain experience points, which go toward earning new levels, new items, and new gameplay opportunities on your farm. Through weeks and months of dedicated farming, you can build your initial small, empty farm into a massive, thriving mega-farm bustling with life.”

(EX1004, 7.)

100. Second, FarmVille discloses several group activities that involve a shared gameplay (*i.e.*, first gameplay and second gameplay). In a barn-raising, “[t]en of your neighbors need to click the link in this news post over the next three days to complete your barn raising and expand your building’s storage[.]”

(EX1004, 156.) In a co-op farming mission, “[e]ach co-op job asks you and your neighbors to grow a set number of specific crops within a set, real-world time limit. Depending on the completion time, the job can earn your co-op group gold, silver, or bronze medals, each of which comes with various coin and experience point (XP) rewards for each member.” (*Id.*, 202.)

101. Third, FarmVille discloses the first gameplay and the second gameplay being the same gameplay by the same FarmVille player across multiple computing devices (or the same device). For example, a FarmVille player can play on his personal computer and then resume the same gameplay on his mobile device. “The FarmVille app offers access to the same farm you maintain on

Facebook.com or FarmVille.com, only now it's literally at your fingertips on the go, wherever you go!" (EX1004, 26.) "With a laptop or mobile device, FarmVille can even help fill those wasted wait times that can seem to fill up a day. Whether it's a lull in your work schedule, an otherwise boring airport layover, a long delay in a doctor's waiting room, or a ride on the subway, you can make it more tolerable by cashing in on coins from the day's harvest." (*Id.*, 8.)

102. As discussed above, any FarmVille player's device participates in a gameplay of the video gaming application (*e.g.*, FarmVille app) via the cloud computing network. (*Supra* §§IX.A.2.a-IX.A.2.b.)

f. 1[C][2]: "the second computing device participating in the second gameplay via a second gaming platform;"

103. FarmVille discloses this element.

104. As discussed above, FarmVille discloses many gaming platforms consistent with the '054 patent, such as Facebook providing access to/play of the game, FarmVille.com, and the FarmVille mobile app. (*Supra* §IX.A.2.d.)

FarmVille discloses that the second computing device participates in the second gameplay via one of these gaming platforms (*e.g.*, the same or a different platform).

g. 1[D]: "receiving one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;"

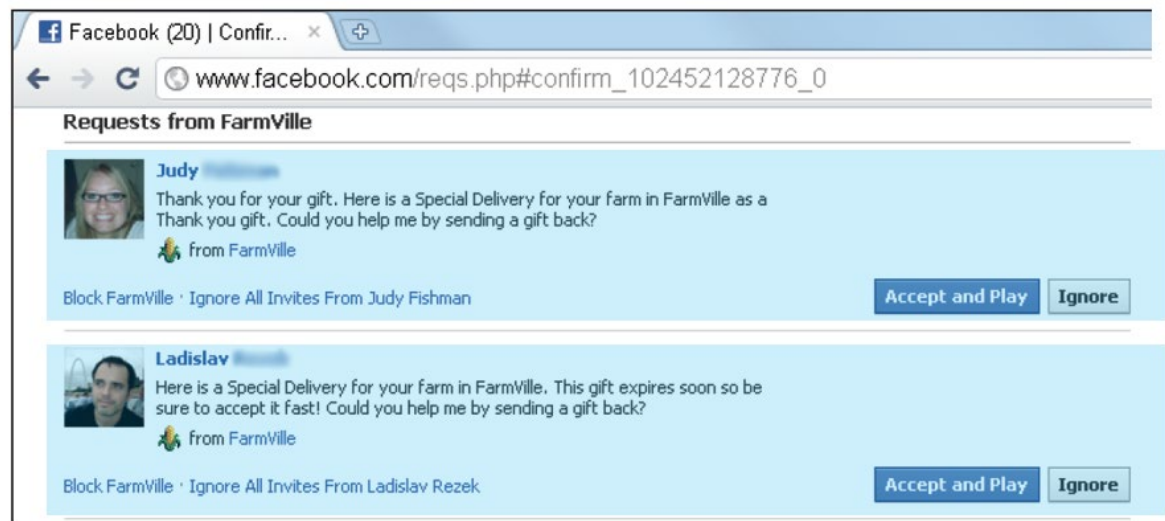
105. Farmville discloses this element.

106. First, FarmVille discloses a *social network service*. FarmVille “takes advantage of *Facebook’s social networking framework* to encourage interaction with other players. Socializing with other players by visiting their farms, sharing gifts, and participating in cooperative jobs is one of the keys to getting the most out of the game.” (EX1004, 9, 15 (“[a]fter your computer is all set up for FarmVille, you need to get connected to Facebook before you start farming.”), 12 (“[a]s a social game, FarmVille is partially focused on helping fellow players, known in the game as neighbors.”).) “Creat[e] a Facebook Account So That You Can Play the Game [-] If you’re not already one of the 500 million (and growing) people with a Facebook account, you need to change that fact before jumping into FarmVille.” (*Id.*, 19.) A POSITA would have found it obvious that Facebook provides or is a *social network service*. The ’054 patent confirms that the same social network website or service can both provide/enable gameplay (hence a gaming platform per claim 2) and receive interactions (per element 1[D]). (*See, e.g.*, EX1001, 28:12-17 (“*social network application (e.g., game application)* . . . processes each post for *comments and likes*”), 13:38-46, FIGS. 1-2.)

107. Second, FarmVille discloses an *event* from a FarmVille gameplay (*e.g.*, first or second gameplay) posted to the *social network service*. “These news posts can involve everything from *opportunities to adopt animals or accept free items to requests for help with building upgrades.*” (EX1004, 70.) These events

(e.g., animal adoption, gifts, items, building projects) are FarmVille events and are associated with gameplays (e.g., first or second gameplay).

108. Below I list several specific examples of FarmVille *events* posted to Facebook. First, a Facebook post can represent a FarmVille *event* of *gifting gifts*. The figure below (excerpt from Figure 3-4) shows example Facebook posts.



(Excerpt from EX1004, Figure 3-4)

109. FarmVille explains how a gift can be initiated. Figure 4-10 shows a FarmVille Gift request addressed to multiple recipients, depicting that Michael Morales is sending a Dutch Rabbit “for your farm in FarmVille.” (EX1004, 71, Figure 4-10.) After the player clicks on the Send button, “[a] *news post* detailing your gift shows up on your neighbor’s *Facebook* news feed.” (EX1004, 66, *see also id.*, Figure 4-8.)



Figure 4-10: A Facebook News feed publishing box.

(EX1004, Figure 4-10)

110. As a second example, a Facebook post can represent a FarmVille *event* of *gifting collectibles and bonuses*. For example, Figure 8-5 shows a Facebook post on the news feed, representing a FarmVille *event* (*i.e.*, saying thank you, chicken coop harvesting, and bonus sharing). (EX1004, 149-150.) As shown by the original annotations, the user can click the links to receive the bonus. (*See also id.*, 70-71 (“[t]he link will be shared on your news feed. . . . Your neighbors will be able to click the link that appears in their news feed to accept the item or bonus or provide help with your request.”).)

Click this link . . .

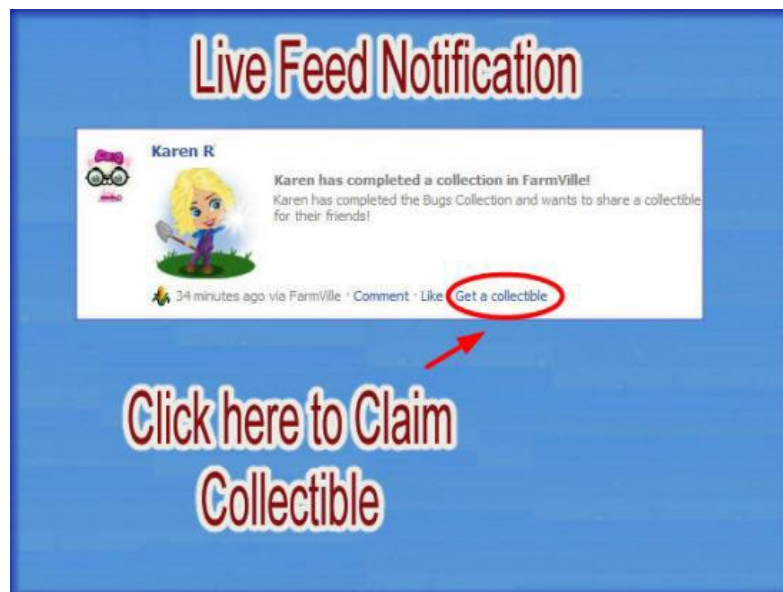


. . . or this one to get your bonus

Figure 8-5: A bonus XP link as seen in a FarmVille news feed.

(EX1004, Figure 8-5)

111. Further, the post below represents a FarmVille *event* (i.e., completing a collection and sharing a collectible). (EX1016, 142.)



(EX1016)

112. As a third example, a Facebook post can represent a FarmVille *event* of *animal adoption*. For example, Figure 3-9 shows a Facebook post on the news feed, representing a FarmVille *event* (*i.e.*, animal found for adoption). (EX1004, 149-150.) “[N]eighbors can then click the link in that *message* to adopt the animal and place it on their farm.” (EX1004, 46.)



Figure 3-9: A lost animal shared via a friend’s Facebook newsfeed.

(EX1004, Figure 3-9)

113. FarmVille explains how the Facebook post is initiated. “As you play FarmVille, every so often a pop-up notification appears, asking whether you want to find a home for a lost, lonely animal. You can’t keep the animal for yourself, but if you click Share, you can post a message about the lost animal to your Facebook news feed.” (EX1004, 46.)

114. As a fourth example, a Facebook post can represent a FarmVille *event* of *barn-raising*. For example, the figure below shows a Facebook post on the

news feed. The Facebook post represents a FarmVille *event* (i.e., Calin is hosting a barn raising).



(EX1017, 1)

115. Specifically, FarmVille explains that players can “expand the storage capacity of storage buildings,” including “barns, tool sheds, chicken coops, dairy farms, and nursery barns,” through barn raising. (EX1004, 156, 155.) First, the player can “[c]lick the building you want to expand and click Expand Storage in the pop-up menu that appears,” and then “[c]lick the Expand button under the building you want to try to expand.” (*Id.*, 155-156.) “A pop-up notification asks you to spread the word for a ‘good ol’ fashioned barn raising!’” and after “[c]lick[ing] Share[, a] *Facebook news feed* post dialog box appears.” (*Id.*) “Typ[ing] an optional message and then click[ing] Publish . . . Your barn-raising request is now posted on your *news feed*.” (*Id.*)

116. As a fifth example, a Facebook post can represent a FarmVille *event* of *inviting a non-player to play FarmVille*. FarmVille explains that the user can

“invite unconverted Facebook friends to sign up for FarmVille” if the user “[c]lick the Invite Friends tab above the FarmVille play area,” “[c]lick the name or picture of up to 50 friends [they] want to invite to play Farmville,” “[c]lick the blue Send FarmVille Request button,” and “[c]lick the blue send button.” (EX1004, 55-56.) Further, “[y]ou can click the Add Personal Message link on this window to type an optional note to go along with your request.” *Id.* “A post appears on your friend’s *Facebook news feed*, asking him or her to join you in playing FarmVille. Any friends who click the Accept and Play button are asked to install the game and set up their farm.” (*Id.*, 56.)



Figure 4-2: The Invite Friends page.

(EX1004, Figure 4-2)

117. As a sixth example, a Facebook post can represent a FarmVille *event* of *neighbor request*. FarmVille explains that the user can “[c]lick the My Neighbors tab,” “click the blue Add as Neighbor button next to the friend to whom [they] want to send a neighbor request,” and then click Send. (EX1004, 54-55.) Further, “[y]ou can click the Add Personal Message link on [the confirmation] window to type an optional note to go along with your request.” (*Id.*, 55) “A neighbor request will be posted to your friend’s *Facebook news feed*.” (*Id.*, 54-55.)



Figure 4-1: The My Neighbors page.

(EX1004, Figure 4-1)

118. As a seventh example, a Facebook post can represent a FarmVille *event* of *co-op job recruiting*. FarmVille explains that a user can “[c]lick the Recruit Friends button in the Co-op Jobs menu,” and “[c]lick the Share button in the [pop-up] notification box” to access the Facebook message posting dialog box as shown in Figure 12-5. (EX1004, 206.) FarmVille states that the user may “[e]nter a message and then click Publish to post the notice on [the user’s] *Facebook wall*.” *Id.*

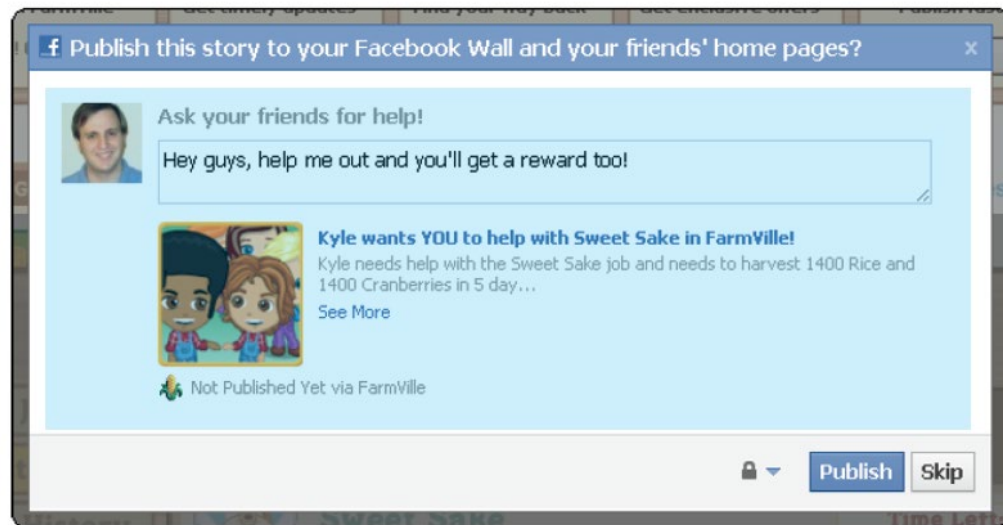


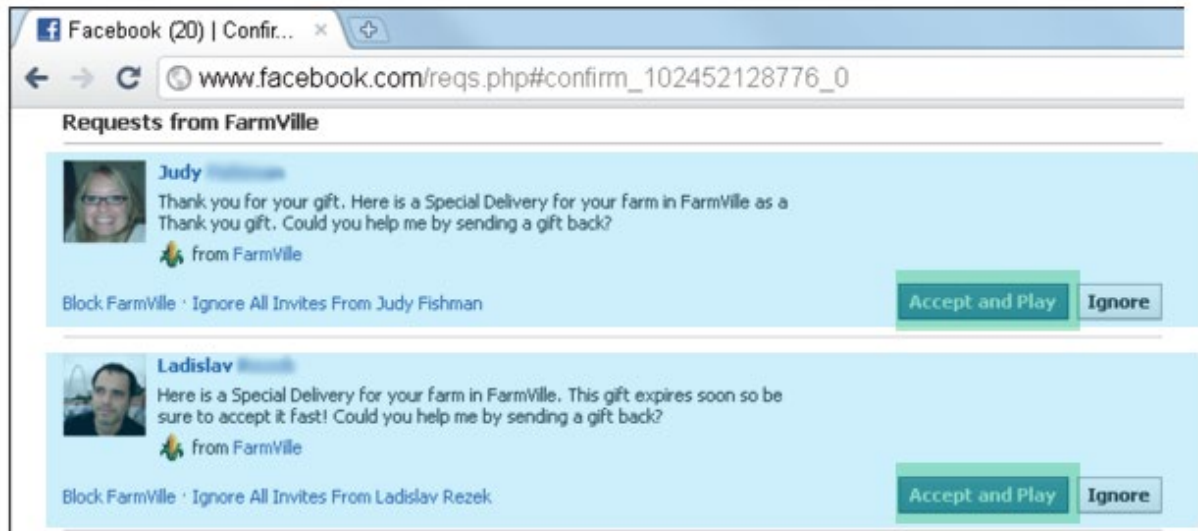
Figure 12-5: Posting a note about your co-op job to the Facebook news feed.

(EX1004, Figure 12-5)

119. Third, FarmVille discloses receiving one or more *interactions* (e.g., a click or data indicative of the click) via a *social network service* in association with an *event*. In the first example (i.e., accepting gifts), to accept a gift, a user can

“*[c]*lick the Accept and Play button next to the gift [they] want to accept.”

(EX1004, 67, Figure 3-4.) As shown, the *click* is via *Facebook*.



(Excerpt from EX1004, Figure 3-4)

120. After acceptance, “the Gift Acceptance confirmation page appears,” confirming that the gift has been accepted. (EX1004, 67.) The user can later “[c]lick the Gift Box icon in the Tools menu” so that “[t]he Gift Box menu appears, which contains all the gifts you accepted[.]” (*Id.*, 67-68.) FarmVille further explains that accepted gifts can be used in the game: “If you click the Use button, you return to your farm to place the item (if it’s a tangible item). Tangible items such as animals and decorations take up physical space on your farm. If it’s an intangible item such as a shovel, fuel, or Farm Cash, the item is added to your inventory automatically.” (*Id.*, 68.)

121. In the second example (*i.e.*, accepting items or bonuses), an **interaction** via the **social network service** in association with an **event** includes a **click** to accept for items or bonuses or provide help. “Your neighbors will be able to **click the link** that appears in **their news feed** to accept the item or bonus or provide help with your request.” (EX1004, 71, Figure 8-5.) For example, for coins and experience points, players can “[c]lick the Get a Bonus from Them link in the **news feed** post” for the “[c]oins and experience points [to be] added to your FarmVille account.” (EX1004, 149.) FarmVille also notes that “some items shared via **news feeds** are available for only a limited time, or are available only to the first few neighbors who **click the link**.” (EX1004, 71.) For example, “bonus links expire 24 hours after they’re posted, so be sure to scour your news feed frequently.” (EX1004, 149.)



Figure 8-5: A bonus XP link as seen in a FarmVille news feed.

(EX1004, Figure 8-5)

122. As the third example (*i.e.*, adopting animals), an *interaction* via the *social network service* in association with an *event* includes a *click* to adopt an animal. “[I]f you see a lost animal on *your friend’s news feed*, you can *click the link* to adopt it for your farm. (It will appear in your Gift Box.)” (EX1004, 46, Figure 3-9.) FarmVille further states that “only the first person to click each news feed link can adopt the animal in question.” (EX1004, 46.)



Figure 3-9: A lost animal shared via a friend’s Facebook newsfeed.

(EX1004, Figure 3-9)

123. As the fourth example (*i.e.*, barn raising), an *interaction* via the *social network service* in association with an *event* includes a *click* to help raise a barn. After a user initiates a barn raising, the “*barn-raising request* is now posted on [their] *news feed*.” (EX1004, 156.) “Ten of your neighbors need to *click the link* in this news post over the next three days to complete your barn raising and expand

your building's storage[.]” (*Id.*) As another example, after purchasing the barn foundation, the user is “prompted to send out a message via the **Facebook live feed**” and “need[s] 10 of your friends to **click on a link** to help you over 3 days.” (EX1016, 70.) “If your friends click on the link they will receive 100 coins for helping you.” (*Id.*)



(EX1017)

124. In the fifth example (*i.e.*, accepting an invitation to play FarmVille), an interaction via the **social network service** in association with an **event** includes a **click** to accept the FarmVille gameplay invitation. “A post appears on your friend’s Facebook **news feed**, asking him or her to join you in playing FarmVille. Any friends who **click** the Accept and Play button are asked to install the game and set up their farm.” (EX1004, 56.)

125. In the sixth example (*i.e.*, accepting neighbor request), an **interaction** via the **social network service** in association with an **event** includes a **click** to

accept a neighbor request. For neighbor requests, “[y]our Facebook friend has to *click* the Accept and Play button on the *news feed* post you sent before he or she officially becomes your neighbor.” (EX1004, 55.) FarmVille further explains that “[f]riends who accept then appear in the form of a profile picture and username in the Neighbor bar at the bottom of your FarmVille game.” *Id.*

126. In the seventh example (*i.e.*, joining a co-op job), an *interaction* via the *social network service* in association with an *event* includes a *click* to join a co-op job. For example, “[y]our neighbors can *click a link* that automatically appears in the *news feed* post to join your co-op job.” (EX1004, 206.) The neighbor’s *click* is an *interaction* by a second user with the *co-op-job event* on *Facebook*.

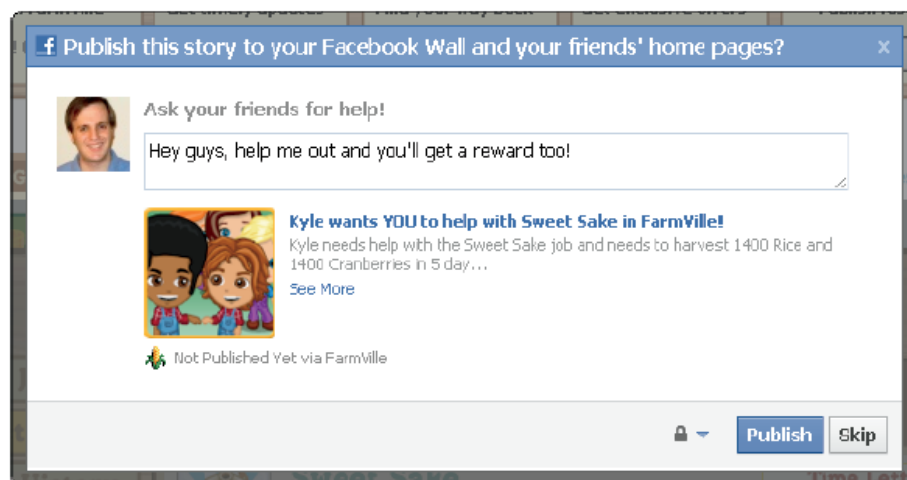


Figure 12-5: Posting a note about your co-op job to the Facebook news feed.

(EX1004, Figure 12-5)

127. In all of these examples, the *interactions* (e.g., clicks) are in association with *events* described in the corresponding posts. The *interactions* (e.g., clicks) are received via Facebook. Further, while this is not required by the claim, Farmville discloses or at least suggests (and a POSITA would find it obvious) that *FarmVille servers* receives data indicative of the *interaction*. “This farm, and the game itself, aren’t actually stored permanently on your computer, but exist on ‘the cloud’ of FarmVille servers maintained by developer Zynga.” (EX1004, 11; *see also* EX1008, EX1013.) Thus, in each of the examples above, a POSITA would have found it obvious that *interaction data indicative of user input and/or intent* (i.e., “*interaction*”) would be received by the *FarmVille servers*. (*See also* EX1008, EX1013.) The *FarmVille servers* would process the *interaction* data to update the game state and/or display of the gameplay. For example, the servers would update server-side databases, inventories, and/or game-state information relating to gifts, items, bonuses, adopted animals, player lists, neighbor lists, barn-raising progress, and co-op job participation and status.

128. Zynga’s own patent confirms that its *gaming servers* (e.g., FarmVille servers) “receive” *interaction data*. With reference to FIG. 3, “the *game networking system 320b* can communicate data 347 (e.g., game state information, game system account information, page info, messages, data requests, updates, etc.) with other networking systems, such as the social networking system 320a

(e.g., Facebook, Myspace, etc.).” (EX1008, 8:57-62, *see also* 3:1-4 (“Game networking system 120b can generate, store, receive, and **transmit** game-related data, such as, for example, game account data, game input, game state data, and game displays”).) Further, **game networking system 320b** receives **game inputs** (323) and **updates** (323, 343).

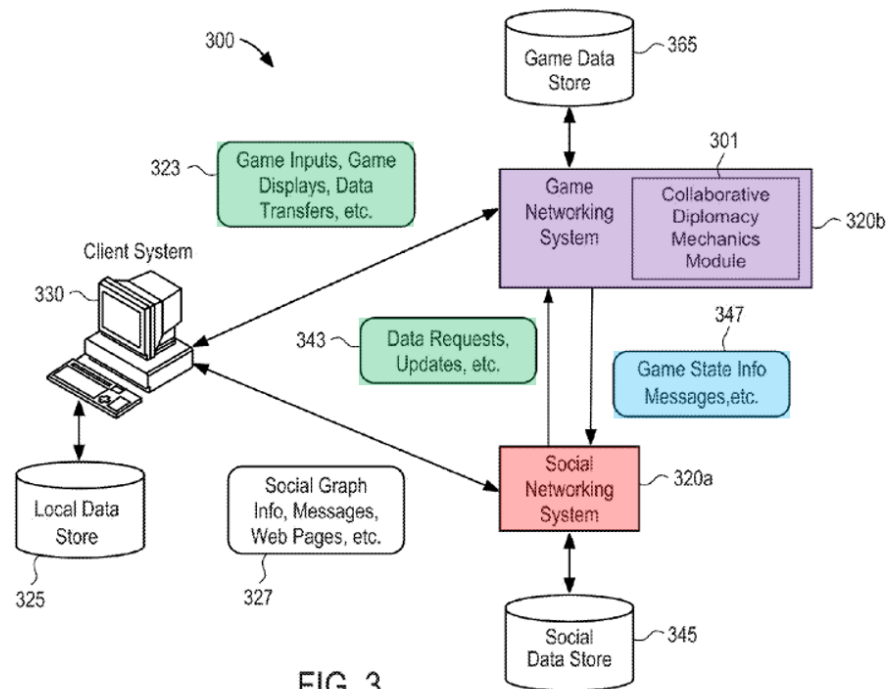


FIG. 3

(EX1008)

129. Further, a POSITA would have understood that the data indicative of the **interaction** would include **metadata** associated with the interaction, such as the identity of the user performing the click and the timing of the interaction, so that the servers could determine whether the interaction satisfied applicable rules. Farmville explains that certain interactions are subject to timing or eligibility

restrictions. For example, “some items shared via news feeds are available for only a limited time, or are available only to the first few neighbors who click the link.” (EX1004, 71.) Likewise, “only the first person to click each news feed link can adopt the animal in question.” (*Id.*, 46.) Similarly, for barn raising, “[t]en of your neighbors need to click the link in this news post over the next three days.” (*Id.*, 156.) A POSITA therefore would have understood that the FarmVille servers receive metadata associated with the clicks—including user identity and timestamp information for example—to determine whether the interaction was made by a qualifying player within a qualifying time period and, in turn, how the game state should be updated.

h. 1[E]: “determining an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service;”

130. Farmville discloses determining an *influence* to one of the first gameplay and the second gameplay of the *video gaming application* based on the one or more *interactions* via the *social network service*.

131. In the first example (*i.e.*, accepting gifts), a player can “click the Accept and Play button next to the gift [they] want to accept” and “[a] Gift Acceptance confirmation page appears, as shown in Figure 4-9.” (EX1004, 67-68.) Further, “[t]he Gift Box menu appears, which contains all the gifts [the player] accepted.” *Id.* In other words, based on the second user’s *interaction*

(indicating a user input/intent to accept a gift), FarmVille determines the *influence* of updating server-side databases (e.g., inventories) and updating the game display.

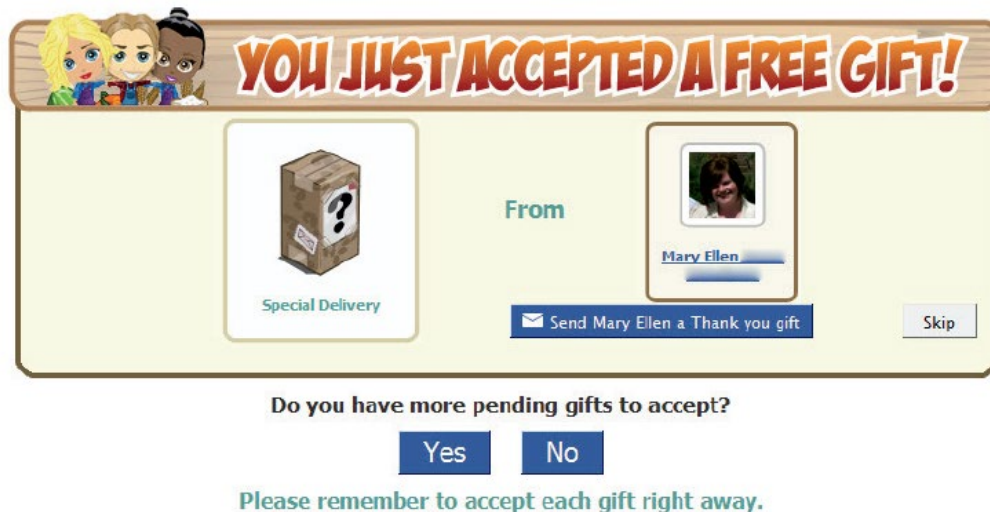


Figure 4-9: The Gift Acceptance confirmation page.

(EX1004, Figure 4-9)

132. In the second example (*i.e.*, accepting items or bonuses), “[y]our neighbors will be able to *click* the link that appears in their news feed to accept the item or bonus. . . .” (EX1004, 71.) “Note that some items shared via news feeds are available for only a limited time, or are available only to the first few neighbors who click the link. Be sure to *click* news feed links shared by your neighbors as soon as possible to take full advantage of these opportunities.” (*Id.*, *see also id.*, 190.) For example, for coins and experience points, players can “[c]lick the Get a Bonus from Them link in the news feed post” for the “[c]oins and experience points [to be] added to your FarmVille account.” (*Id.*, 149.) However, “[the]

bonus links expire 24 hours after they're posted, so be sure to scour your news feed frequently.” *Id.* In other words, based on the second user’s *interaction* (indicating a user input/intent to accept) and the eligibility requirements, FarmVille determines the *influence* of whether and how to update server-side databases (e.g., inventories of items or bonuses) and update the game display.

133. In the third example (*i.e.*, adopting animals), FarmVille discloses that “if you see a lost animal on your friend’s news feed, you can *click* the link to adopt it for your farm. (It will appear in your Gift Box.) Note that only the first person to *click* each news feed link can adopt the animal in question, so keep your eyes peeled and your clicking finger ready. Also note that some types of animals are available exclusively through adoption.” (EX1004, 46.) In other words, based on the second user’s *interaction* (indicating a user input/intent to adopt) and the eligibility requirements, FarmVille determines the *influence* of whether to update server-side databases (e.g., inventories of adopted animals) and update the game display (e.g., Farm GUI, Gift Box GUI).

134. In the fourth example (*i.e.*, barn raising), FarmVille states that “[t]en of your neighbors need to *click* the link in this news post over the next three days to complete your barn raising and expand your building’s storage[.]” (EX1004, 156.) Further, “you will earn 100 coins” “in return for helping your friends with the Barn Raising.” (EX1017, 1-2; EX1016, 70 (“[i]f your friends click on the link

they will receive 100 coins for helping you”).) In other words, based on the second user’s *interaction* (indicating a user input/intent to help) and the eligibility requirements, FarmVille determines the *influence* of whether to update server-side databases or states (e.g., barn raising progress, coin rewards, building storage) and update the game display.

135. In the fifth example (i.e., accepting an invitation to play FarmVille), “[a] post appears on your friend’s Facebook news feed, asking him or her to join you in playing FarmVille. Any friends who *click* the Accept and Play button are asked to install the game and set up their farm.” (EX1004, 56.) In other words, based on the second user’s *interaction* (indicating a user input/intent to accept), FarmVille determines *influence* of updating server-side databases (e.g., list of the FarmVille players) and updating the game display (e.g., prompt to install the FarmVille game and instructions for setting up a farm/game).

136. In the sixth example (i.e., accepting neighbor requests), “[y]our Facebook friend has to *click* the Accept and Play button on the news feed post you sent before he or she officially becomes your neighbor. Friends who accept then appear in the form of a profile picture and username in the Neighbor bar at the bottom of your FarmVille game.” (EX1004, 55.) In other words, based on the second user’s *interaction* (indicating a user input/intent to accept), FarmVille

determines the *influence* of updating server-side databases (e.g., list of neighbors) and updating the game display (e.g., Neighbor bar GUI).

137. In the seventh example (i.e., joining co-op jobs), “neighbors can *click* a link that automatically appears in the [Facebook] news feed post to join your co-op job.” (EX1004, 206.) In other words, based on the second user’s *interaction* (indicating a user input/intent to join), FarmVille determines the *influence* of updating server-side databases (e.g., list of co-op job participation and status) and updating the game display (e.g., co-op job GUI).

138. As discussed above, Farmville explains that certain interactions are subject to timing or eligibility restrictions. For example, “some items shared via news feeds are available for only a limited time, or are available only to the first few neighbors who click the link.” (EX1004, 71.) Likewise, “only the first person to click each news feed link can adopt the animal in question.” (Id., 46.) Similarly, for barn raising, “[t]en of your neighbors need to click the link in this news post over the next three days.” (Id., 156.) A POSITA therefore would have understood that the FarmVille servers determine, based on the interactions and applicable rules, the influence to the gameplay.

i. 1[F]: “and modifying one of the first gameplay and the second gameplay of the video gaming application based on the influence.”

139. FarmVille discloses or renders obvious this element.

140. In the first example (*i.e.*, accepting gifts), a player can “[c]lick the Accept and Play button next to the gift [they] want to accept” and “[a] *Gift Acceptance confirmation page appears*, as shown in Figure 4-9.” (EX1004, 67-68.) Further, “[t]he *Gift Box menu appears*, which contains all the gifts [the player] accepted[.]” *Id.* FarmVille further explains that accepted gifts can be used in the game: “If you click the Use button, you return to your farm to place the item (if it’s a tangible item). Tangible items such as animals and decorations take up physical space on your farm. If it’s an intangible item such as a shovel, fuel, or Farm Cash, the item is added to your inventory automatically.” (EX1004, 68.) In other words, the FarmVille servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases and updating the game display. The modification is based on the *influence*. (*Supra* §IX.A.2.h.)



Figure 4-9: The Gift Acceptance confirmation page.

(EX1004, Figure 4-9)

141. In the second example (*i.e.*, accepting items or bonuses), “[y]our neighbors will be able to click the link that appears in their news feed to *accept the item or bonus*. . . .” (EX1004, 71.) For example, for coins and experience points, players can “[c]lick the Get a Bonus from Them link in the news feed post” for the “[c]oins and experience points [to be] added to your FarmVille account.” (EX1004, 149.) In other words, the FarmVille servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases (*e.g.*, of items or bonuses) and updating the game display. The modification is based on the *influence*. (*Supra* §IX.A.2.h.)

142. In the third example (*i.e.*, adopting animals), “[y]our neighbors can then click the link in that message to adopt the animal and *place it on their farm*. Likewise, if you see a lost animal on your friend’s news feed, you can click the link to *adopt it for your farm. (It will appear in your Gift Box.)*” (EX1004, 46.) In other words, the FarmVille servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases (*e.g.*, of adopted animals) and updating the game display (*e.g.*, Farm GUI, Gift Box GUI). The modification is based on the *influence*. (*Supra* §IX.A.2.h.)

143. In the fourth example (*i.e.*, barn raising), “[t]en of your neighbors need to click the link in this news post over the next three days to *complete your*

barn raising and expand your building's storage[.]" (EX1004, 156.) Further, "you will *earn 100 coins*" "in return for helping your friends with the Barn Raising [by clicking on the link]." (EX1017, 1-2; *see also* EX1016, 70 ("[i]f your friends click on the link they will *receive 100 coins* for helping you").) In other words, the FarmVille servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases or states (*e.g.*, barn raising progress, coin rewards, building storage) and updating the game display. The modification is based on the *influence*. (*Supra* §IX.A.2.h.)

144. In the fifth example (*i.e.*, accepting an invitation to play FarmVille), "[a]ny friends who click the Accept and Play button are *asked to install the game* and *set up their farm*." (EX1004, 56.) In other words, the FarmVille servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases (*e.g.*, of the players) and updating the game display (*e.g.*, prompt to install the FarmVille game and instructions for setting up a farm/game). The modification is based on the *influence*. (*Supra* §IX.A.2.h.)

145. In the sixth example (*i.e.*, accepting neighbor requests), "[y]our Facebook friend has to click the Accept and Play button on the news feed post you sent before he or she officially *becomes your neighbor*. Friends who accept then *appear in the form of a profile picture and username in the Neighbor bar* at the bottom of your *Farmville game*." (EX1004, 55.) In other words, the FarmVille

servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases (*e.g.*, of neighbors) and updating the game display (*e.g.*, Neighbor bar GUI). The modification is based on the *influence*. (*Supra* §IX.A.2.h.)

146. In the seventh example (*i.e.*, accepting co-op jobs), a modification to the *gameplay* by the server is the addition of a player to the co-op job. FarmVille explains that “[y]our neighbors can click a link that automatically appears in the news feed post to *join your co-op job*.” (EX1004, 206.) In other words, the FarmVille servers modify the gameplay (*e.g.*, first or second gameplay) by updating server-side databases (*e.g.*, of co-op job participation and status) and updating the game display (*e.g.*, co-op job GUI). The modification is based on the *influence*. (*Supra* §IX.A.2.h.) The modification in FarmVille is consistent with the “in-game reward” described in the ’054 patent. (EX1001, FIG. 4, 26:50-67.)

3. Claim 2: “The computer-implemented method of claim 1, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

147. Farmville discloses this claim. As discussed, FarmVille discloses a gaming platform that is a mobile device, a game console, a social network messaging application providing gameplay, and a social website providing gameplay. (*Supra* §IX.A.2.d.)

4. Claim 3

a. 3[A]: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared

gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and”

148. Farmville discloses this element.

149. As a first example, the first gameplay is a FarmVille player’s gameplay on his own farm and a second gameplay is another FarmVille player’s gameplay on the same farm. They are a shared gameplay because they involve working on the same farm. “As a social game, FarmVille is partially focused on *helping fellow players*, known in the game as neighbors.” (EX1004, 12; *see also id.*, 54-55.) “You can help your neighbors by sending them free gifts or by visiting their farms and performing some basic farming tasks daily. After you’ve been playing for a while, you’ll also be qualified to work with neighbors on co-op missions (as discussed in Chapter 12) and buy crafted goods from the Farmers Market (as discussed in Chapter 7). Of course, your neighbors can do all these things for you as well, forming a big, reciprocal cycle of good will.” (*Id.*) In Figure 4-1 (below), FarmVille provides a button to “Go to Candace’s farm” to engage in shared gameplay with Candace.



Figure 4-1: The My Neighbors page.

(EX1004, Figure 4-1)

150. This is consistent with the '054 patent, which states that players “may access a virtual game arena, their own or that of other players” and that “[p]layers . . . can request permission to visit game play arenas of other players” (EX1001, 8:26-28, 8:21-23.)

151. FarmVille discloses many aspects of the shared gameplay on the same farm. “It might seem silly to go do farm work on your neighbors’ farms when you have so much to do on your own farm. But don’t be fooled — *visiting and helping your neighbors’ farms* is a great way to earn some extra Farm Coins, XP, and possibly some free items each day. To *visit a neighbor’s farm*, simply click that

neighbor's image in the Neighbor bar at the bottom of the play area and then click Visit/Help Farm from the drop-down menu. The farming screen fades out for a few seconds and your neighbor's farm appears with your farmer avatar standing in the center. To return to your farm at any time, click the Return Home button just above the Tools menu, as shown in Figure 4-5." (EX1004, 61.) When visiting another player's farm, the neighbor "can harvest two trees, fertilize two plots of land, and unwither one crop before having to move on to another farm for the day." (EX1004, 61-62.)



Figure 4-5: The Return Home button.

(EX1004, Figure 4-5)

152. Second, FarmVille discloses several group activities that involve a shared gameplay. In a barn-raising, "[t]en of your neighbors need to click the link in this news post over the next three days to complete your barn raising and expand your building's storage[.]" (EX1004, 156.) Here, the farm owner and the participating neighbors share the same barn-raising gameplay.

153. In a co-op farming mission, "[e]ach co-op job asks you and your neighbors to grow a set number of specific crops within a set, real-world time

limit. Depending on the completion time, the job can earn your co-op group gold, silver, or bronze medals, each of which comes with various coin and experience point (XP) rewards for each member.” (EX1004, 202.) Here, the farm owner and the participating neighbors share the same co-op gameplay.



Figure 12-4: The Active Job menu.

(EX1004, Figure 12-4)

154. “Neighbors can also join your co-op jobs by visiting the Co-op Jobs menu. Jobs currently under way by neighbors are shown first in the Co-op Jobs menu, so any of your neighbors can easily join your job just by clicking the Join button in their game. Because you need to rely on your neighbors’ participation . . . you should coordinate with your fellow co-op participants and decide who should grow what crops and in what quantities.” (EX1004, 206.) “You can check on your

team's progress toward the co-op job goal at any time by clicking the Active Job tab in the Co-op Farming menu (refer to Figure 12-4)." (*Id.*, 207.)

155. As a third example, the first gameplay and the second gameplay are the same gameplay by the same FarmVille player across multiple computing devices. For example, a FarmVille player can play on his personal computer and then resume the same gameplay on his mobile device. "The FarmVille app offers access to the same farm you maintain on Facebook.com or FarmVille.com, only now it's literally at your fingertips on the go, wherever you go!" (EX1004, 26.) "With a laptop or mobile device, FarmVille can even help fill those wasted wait times that can seem to fill up a day. Whether it's a lull in your work schedule, an otherwise boring airport layover, a long delay in a doctor's waiting room, or a ride on the subway, you can make it more tolerable by cashing in on coins from the day's harvest." (*Id.*, 8.)

b. 3[B]: "wherein the first computing device is a personal computer and the second computing device is a mobile device."

156. Farmville discloses this element.

157. As discussed above, FarmVille can be accessed via a personal computer and a mobile device. (*Supra* §§IX.A.2.a, IX.A.4.a.) "With a laptop or mobile device, FarmVille can even help fill those wasted wait times that can seem to fill up a day." (EX1004, 8.) "Using a *computer* with Internet access is the easiest way to play FarmVille and practically any *computer* that can handle a

graphical Web browser can handle the game.” (EX1004, 15.) And “[i]n June 2010, Zynga launched the first mobile FarmVille app for the *iPhone, iPod Touch, and iPad*. The FarmVille app offers access to the same farm you maintain on Facebook.com or FarmVille.com[.]” (EX1004, 26, *see also id.*, 15 (“Don’t have a computer? That’s okay; you can now play FarmVille on *Apple iOS devices, including the iPhone.*”).) Therefore, a POSITA would find it obvious that FarmVille discloses a configuration where the first player uses a personal computer (*i.e.*, first computing device) to play the game, while the second player uses a mobile device (*i.e.*, second computing device) to play the game.

5. Claim 4: “The computer-implemented method of claim 3, wherein the first player and the second player have different levels of capability in the shared gameplay.”

158. Farmville discloses this claim.

159. In the first example discussed in claim 3, a farmer (*i.e.*, first player) and a neighbor (*i.e.*, second player) have different levels of capability on the farm. On a given farm, a neighbor has limited capabilities relative to the farm’s owner. “Farming on your *neighbor’s farm* isn’t exactly like *farming on your own* — you’re actually quite limited in the actions you can take to help your neighbor. Each action comes with its own separate reward as well, as discussed in the upcoming list. Note that, except for feeding chickens, you can complete only five of these tasks in aggregate per neighbor farm per calendar day. For example, you

can harvest two trees, fertilize two plots of land, and unwither one crop before having to move on to another farm for the day. Feeding chickens in chicken coops does not count toward this total, but you can feed each neighbor's chickens only once per day.” (EX1004, 62.)

160. In general, Farmville also discloses any two players can have different levels of capability based on their “levels.” Thus, any two players in the examples in claim 3 can have different levels of capability in the shared gameplay. “Many new levels come with the keys to previously locked parts of the FarmVille experience, including new items for purchase and gifting and even previously inaccessible gameplay features.” (EX1004, 139.) As shown in the excerpt of Table 8-1 below, for example, one of the features unlocked once a player reaches the status of Level 4 is the capability to “[f]ertilize neighbors’ farms[.]”

Table 8-1 Level XP Requirements and Unlocked Features for Levels 1–40					
<i>Level</i>	<i>Total XP Needed</i>	<i>Level Name</i>	<i>Buyable Items</i>	<i>Giftable Items</i>	<i>Gameplay Features</i>
1	0	Field Hand	See Chapter 3		
2	15	Kinderfarmer	Plum Tree, Hay Bale	Plum Tree	
3	30	Amateur Farmer	Barrel, Colored Hay Bales	Fig Tree, Green Hay Bale	
4	70	Able Farmer	Squash and Lilac Seeds, Chickens, Peach Trees, Rest Tent, Crate	Chicken, Peach Tree	Fertilize neighbors' farms (See Chapter 4)
5	140	Handy Farmer	Pumpkin Seeds, White and Brown Stools	Avocado Trees	
6	250	Nimble Farmer	Artichoke and Spinach Seeds, Mailbox		Storage features (see Chapter 9)
7	400	Savvy Farmer	Rice Seeds, Sheep, Lemon Tree, Butter Churn, Well	Sheep, Lemon Tree	Sell items (see Chapter 3)
8	600	Fancy Farmer	Raspberry and Daffodil Seeds, Wood Pile, Tool Shed	Apricot Tree	
9	850	Sophisticated Farmer	Cotton Seeds, Bike, Wagon		
10	1,150	Splendid Farmer	Cranberry and Chickpea* Seeds, Lime Tree, Fruit Stand, Wood Fence, Picnic Set	Pig, Lime Tree	Crop Mastery and Collections (see Chapter 11)
11	1,500	Farming Magician	Bell Pepper and Rhubarb Seeds, Stone Mailbox	Grapefruit Tree	

(EX1004, Excerpt of Table 8-1.)

161. Further, the excerpt of Table 8-2 below describes items that can only be gifted by players at higher levels. (EX1004, 143-44.) “[T]here are the highly-sought-after trees that you have to acquire as gifts from your neighbors. These include the Jackfruit tree, which you can get as a free Mystery Gift, and the *Ginkgo tree*, which your neighbors can send you as a normal gift.” (EX1004, 49.)

Table 8-2 (continued)		
Level	Buyable Items	Giftable Items
50	Lemon Balm Seeds	Azaleas
52	Square Melon Seeds	
53	Oat Seeds	
54	Posole Corn Seeds	
55	Arapawa Goat	
57	Heirloom Carrot* Seeds	
59	Orange Daisy Seeds	
60	Bamboo Seeds	Ginko Tree
63	Carnival Squash Seeds	
64	Saffron Seeds	
65	Silo Home	
70	Clover Seeds, Mansion	Floral Container
75	Belted Cow	
76	Amaranth Seeds	
80	White Rose Seeds	Mangrove Tree
85	Pheasant	
90	Forget Me Not Seeds	Dutch Rabbit
95	Cattail Pond	
100		Jacaranda Tree

(EX1004, Excerpt of Table 8-2.)

162. Thus, a POSITA would understand that any two players in any shared gameplay as discussed in claim 3 can have different levels of capability due to their different levels.

6. Claim 5: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared game played by a same player via different platforms.”

163. FarmVille discloses this claim.

164. As discussed above, a FarmVille player can play on his personal computer and then resume the same gameplay on his mobile device (*i.e.*, different platforms). (*Supra* §IX.A.4.) “With a laptop or mobile device, FarmVille can even help fill those wasted wait times that can seem to fill up a day. Whether it’s a

lull in your work schedule, an otherwise boring airport layover, a long delay in a doctor's waiting room, or a ride on the subway, you can make it more tolerable by cashing in on coins from the day's harvest." (EX1004, 8.) "The FarmVille app offers access to the same farm you maintain on Facebook.com or FarmVille.com, only now it's literally at your fingertips on the go, wherever you go!" (*Id.*, 26.) "Satisfying gameplay *sessions* in FarmVille can last as little as a few minutes, and real-world interruptions won't ruin your progress, because the game saves your progress constantly." (*Id.*, 8.)

165. FarmVille saves a FarmVille player's game state to track progress. Farmville discloses that "[t]he basic concept of FarmVille is relatively simple. You manage *your virtual farm* by planting, growing, and harvesting virtual crops; tending livestock and trees; constructing buildings such as barns and chicken coops; and buying and selling goods made on the farm. By completing these tasks, you earn coins that you can spend to *expand and upgrade your farm*. You also gain experience points, which go toward earning new levels, new items, and new gameplay opportunities on your farm. Through *weeks and months of dedicated farming*, you can build your initial small, empty *farm* into a massive, thriving mega-farm bustling with life." (EX1004, 7.) Farmville states that "[p]roblems with *saving* most commonly occur right after users expand their land and rearrange their farms to accommodate their new space. . . The solution: Zynga recommends

staying on your farm for at least 15 minutes before closing your Web browser or leaving the FarmVille page to avoid problems with saving your actions.” (*Id.*, 228.) This is consistent with the ’054 patent, which states that players “may access a virtual game arena, their own or that of other players, via several platforms and *take up play where they left off.*” (EX1001, 8:26-28.)

166. FarmVille discloses multiple platforms, including the FarmVille mobile app, Facebook, and FarmVille.com. The same FarmVille player can have continuous gameplay across these platforms. “The FarmVille app offers access to *the same farm you maintain* on Facebook.com or FarmVille.com, only now it’s literally at your fingertips on the go, wherever you go!” (EX1004, 26.) “If you don’t want to go through the Facebook home page every time you play FarmVille, you can also access the game directly through the FarmVille Web site at <http://www.farmville.com>, as shown in Figure 2-4. The game is almost *exactly the same in both Web locations* — in fact, the same farm you maintain on Facebook is accessible on FarmVille.com, and vice versa.” (EX1004, 24.)

7. Claim 6: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are *different games* played by different players via a same gaming platform”

167. FarmVille discloses this claim.

168. In FarmVille, different players play different games when they work on their own farms. “The basic concept of FarmVille is relatively simple. You

manage your virtual farm by planting, growing, and harvesting virtual crops; tending livestock and trees; constructing buildings such as barns and chicken coops; and buying and selling goods made on the farm. By completing these tasks, you earn coins that you can spend to expand and upgrade your farm. You also gain experience points, which go toward earning new levels, new items, and new gameplay opportunities on your farm. Through weeks and months of dedicated farming, you can build your initial small, empty farm into a massive, thriving mega-farm bustling with life.” (EX1004, 7.) This is consistent with the ’054 patent, which shows different games to be different parts of a virtual arena. (EX1001, FIGS. 8, 10, 35.) The ’054 patent also states that players “may access a virtual game arena, their own *or that of other players*, via several platforms and take up play where they left off.” (EX1001, 8:26-28.)

169. Additionally or alternatively, FarmVille discloses that different players can play different Zynga games. As shown in Figure 2-4, the game interface on FarmVille.com links players at the top toolbar to additional games: “FrontierVille”, “Zynga Poker”, “Mafia Wars”, “Café World”, “Treasure Isle”, and “YoVille”.

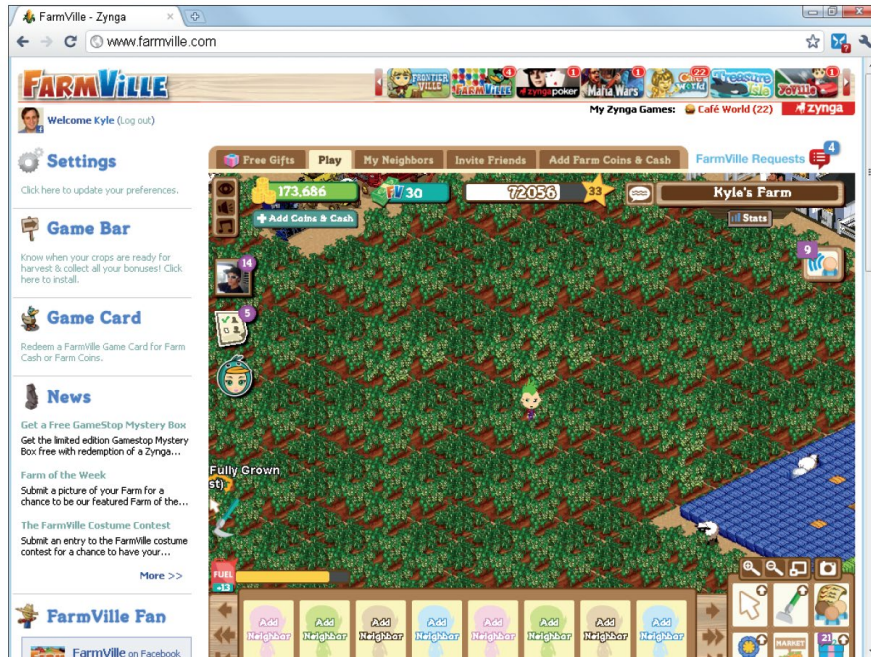


Figure 2-4: Playing FarmVille through FarmVille.com.

(EX1004, Figure 2-4)

170. As discussed above, any FarmVille player can play the game via multiple gaming platforms, such as Facebook providing gameplay, the mobile app, or FarmVille.com. (*Supra* §IX.A.2.d.) It would have been obvious to a POSITA that some of the FarmVille players play via the same gaming platform. For example, two players can both play different games both on Facebook, FarmVille.com, or the FarmVille mobile app.

8. Claim 7: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are *different games* played by different players via a different gaming platform.”

171. FarmVille discloses this claim.

172. As discussed with respect to claim 6, FarmVille discloses the first gameplay and the second gameplay are different games played by different players. (*Supra* §IX.A.7.)

173. Further, any FarmVille player can play the game via multiple gaming platforms, such as Facebook, the mobile app, or FarmVille.com. (*Supra* §IX.A.2.d.) It would have been obvious to a POSITA that some of the FarmVille players play via the different gaming platforms.

9. Claim 8: “The computer-implemented method of claim 1, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

174. Farmville discloses that the game content in the first gameplay and second gameplay is platform agnostic. The '054 patent discloses that “[a] central unit 4210 may facilitate *continuous game play* that is *shared across all platforms*, thereby making the game content agnostic.” (EX1001, 27:46-49.)

175. Consistent with the '054 patent, FarmVille provides continuous game play that is shared across Facebook FarmVille app, FarmVille.com, and the mobile app. “The FarmVille app offers access to *the same farm you maintain* on Facebook.com or FarmVille.com, only now it’s literally at your fingertips on the go, wherever you go!” (EX1004, 26.) “If you don’t want to go through the Facebook home page every time you play FarmVille, you can also access the game directly through the FarmVille Web site at <http://www.farmville.com>, as shown in

Figure 2-4. The game is almost *exactly the same in both Web locations* — in fact, the same farm you maintain on Facebook is accessible on FarmVille.com, and vice versa.” (*Id.*, 24.) “Satisfying gameplay *sessions* in FarmVille can last as little as a few minutes, and real-world interruptions won’t ruin your progress, because the game saves your progress constantly.” (*Id.*, 8.)

10. Claim 9: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social network service that enables users of the video gaming application to send text-based posts.”

176. Farmville discloses this claim.

177. First, FarmVille discloses a *video gaming application* linked with a *social network service*. FarmVille “takes advantage of *Facebook*’s social networking framework to encourage interaction with other players. Socializing with other players by visiting their farms, sharing gifts, and participating in cooperative jobs is one of the keys to getting the most out of the game.” (EX1004, 9.) “In May 2007, the introduction of the Facebook platform allowed third-party companies to build applications that integrated seamlessly with Facebook’s social network, letting users connect with their friends in myriad new ways. This integration included games such as FarmVille, which launched on the network in June 2009.” (EX1004, 21.)

178. A FarmVille player needs to install the FarmVille app on Facebook to play. “If you’ve set up your *Facebook* account (see the preceding section for how

to do that), you're almost ready to start enjoying life on your virtual farm!

Installing the FarmVille app to your [Facebook] account is the only piece of business left to take care of before you can start the game, and it's an easy one."

(EX1004, 22.) Specifically, the FarmVille player needs to "[c]lick the blue Allow button to give FarmVille access to the basic profile information on [their] Facebook account." (*Id.*)

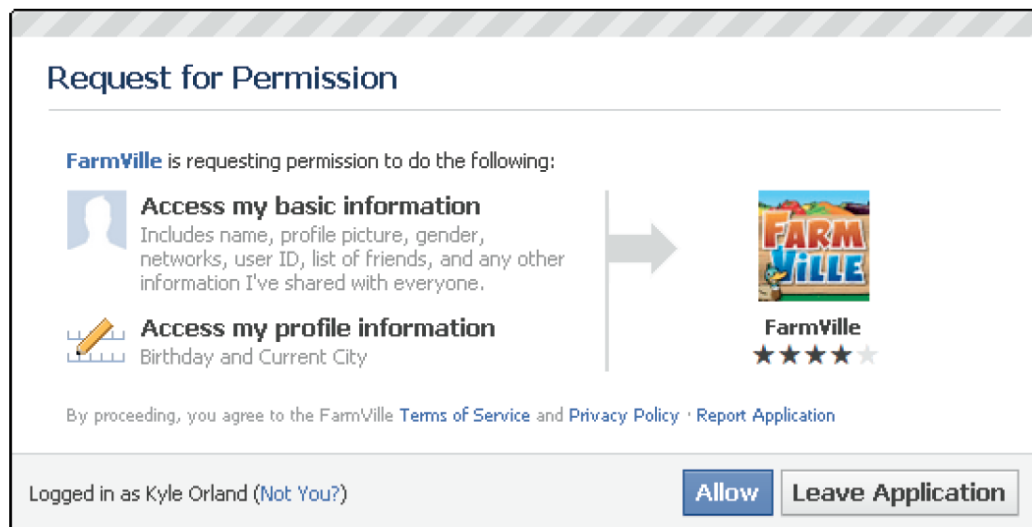


Figure 2-2: The Request for Permission page.

(EX1004, Figure 2-2)

179. Second, FarmVille discloses ***Facebook*** enables FarmVille players to send text-based posts. (*Supra* §IX.A.2 .) "While you're playing FarmVille, many opportunities arise for you to post a message on your Facebook news feed. These news posts can involve everything from opportunities to adopt animals or accept free items to requests for help with building upgrades. These opportunities are

usually indicated by a Share button or something similar that shows up in a pop-up notification window as you play. Clicking such a button brings up the News Feed publishing box, as shown in Figure 4-10.” (EX1004, 70.) Below are examples of Facebook’s graphical user interface that allows FarmVille players to create text-based posts.

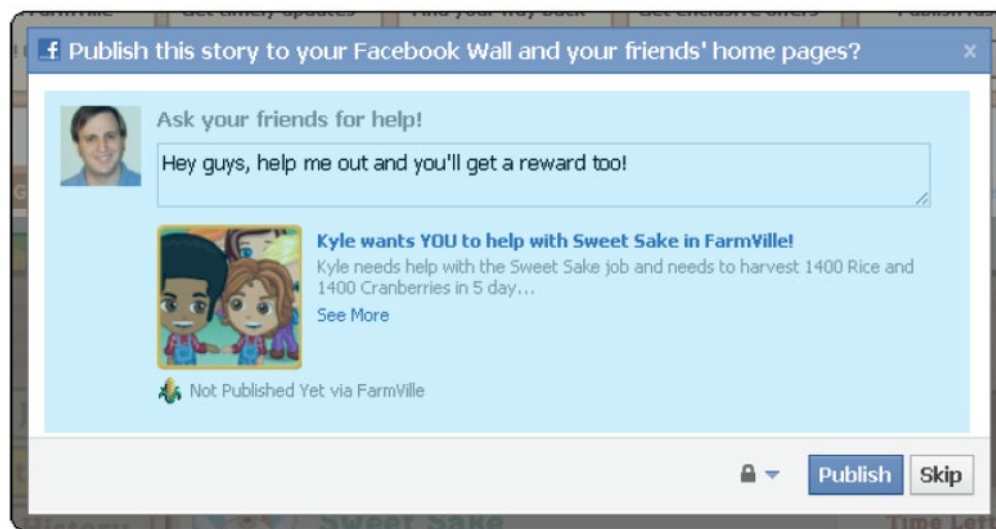
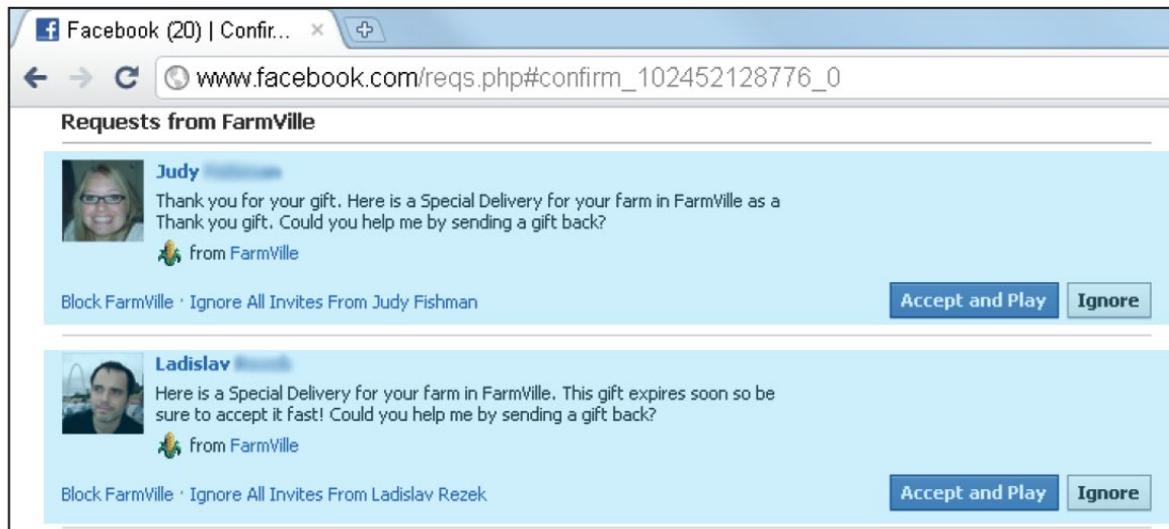


Figure 12-5: Posting a note about your co-op job to the Facebook news feed.

(EX1004, Figure 12-5)

180. Below are some examples of such text-based Facebook posts.



(Excerpt from EX1004, Figure 3-4)



Figure 8-5: A bonus XP link as seen in a FarmVille news feed.

(EX1004, Figure 8-5)



Figure 3-9: A lost animal shared via a friend’s Facebook newsfeed.

(EX1004, Figure 3-9)

11. Claim 10: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social network service to enable text-based posts to be broadcasted for the event from one of the first gameplay and the second gameplay.”

181. Farmville discloses this claim. As discussed above, Farmville discloses that FarmVille game application is linked with Facebook to enable text-based posts. (*Supra* §IX.A.10.) Further, these text-based posts are broadcasted by being posted to Facebook news feeds for Facebook users to see. (*See, e.g.*, EX1004, 55, 56, 63, 64, 66, 70, 117, 150, 156.)

12. Claim 11: “The computer-implemented method of claim 1, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

182. Farmville discloses this claim. As discussed above, Farmville discloses the video game application is linked with **Facebook**. (*Supra* §IX.A.10.) Further, Facebook enables social network activities (*e.g.*, viewing and clicking on a

Facebook post) to affect one of the first gameplay and the second gameplay.

(*Supra* §IX.A.2.i.)

183. Additionally or alternatively, FarmVille discloses a social network application within the FarmVille game, “*Comments menu*.” “Clicking this button allows you to place a Sign Post or leave a comment on your farm a farm you’re visiting. After clicking the icon, click an empty portion of the farm to bring up the *Comments menu*, as shown in Figure 3-5. Type your message in the text box and then click the Post button to add your comment to the *farm’s comments thread*. These comments are readable by anyone who visits that farm, so don’t write anything you’re not comfortable sharing with the wider world.” (EX1004, 36.)

184. As shown in Figure 3-5 below, players can post comments directly to the thread on their own or another player’s farm. When posting to the Comments thread on a farm, “you can select optional check boxes on the Comments menu to copy the comment to your neighbor’s Facebook wall or to leave the comment as a message sign, which then sits on the farm and is permanently readable by anyone who clicks it. On the Comments menu, you can also click the Visits tab to show which neighbors have recently visited your farm.” (EX1004, 37.) Thus, the Comments Menu enables social network activities (*e.g.*, placing sign posts) to affect one of the first gameplay and the second gameplay (*e.g.*, causing the comments to appear in the farm, sending potential directives that affect gameplay).



Figure 3-5: The Comments menu.

(EX1004, 37.)

13. Claim 12: “The computer-implemented method of claim 11, wherein the social network application is included in the video gaming application.”

185. Farmville discloses or renders obvious this claim.

186. FarmVille’s “Comments menu” is a social network application included in the FarmVille application, because the “Comments menu” is an in-game feature that allows users of the video gaming application (*i.e.*, FarmVille players) to socialize within the video gaming application. (*Supra* §IX.A.12 .)

14. Claim 13: “The computer-implemented method of claim 11, wherein the social network application is a stand-alone third-party application coupled to the video gaming application.”

187. Farmville discloses this claim.

188. Facebook is a stand-alone third-party social network application. Facebook is developed by a separate entity from FarmVille’s developer Zynga. “Social networking mega-site Facebook.com got its start at Harvard University in

2004. Facebook co-creator Mark Zuckerberg conceived of the site as a MySpace-style social network focused exclusively on letting college students connect and interact (though there's some controversy as to whether he devised the idea on his own or not). Though Harvard students were the first to have access to the site, the network quickly expanded to other colleges and then high schools and employers. Finally, in September 2006, anyone with a valid e-mail address could sign up for the site. Though the functionality of the site was initially quite basic, features such as tagging, photosharing, and the now-ubiquitous wall were introduced at a breakneck pace over the subsequent years.” (EX1004, 21.) Facebook is also separate from FarmVille.com. (*Id.*, 24-25.)

189. FarmVille also discloses **Facebook** is coupled to the **FarmVille game**. “In May 2007, the introduction of the Facebook platform allowed third-party companies to build applications that integrated seamlessly with Facebook’s social network, letting users connect with their friends in myriad new ways. This integration included games such as FarmVille, which launched on the network in June 2009.” (EX1004, 21.) As discussed above, FarmVille players link the two in order to play the game. (*Supra* §IX.A.10.)

15. Claim 14:

a. 14[PR]: “A system for hosting and providing a video gaming environment to one or more users, comprising:

190. To the extent limiting, FarmVille discloses or renders obvious this preamble. As discussed above, FarmVille discloses hosting and providing a video gaming environment to one or more users. (*Supra* §§IX.A.2.a, IX.A.2.b.) It would have been obvious to a POSITA that implementing the FarmVille game involves a computer-implemented system including the FarmVille servers.

b. 14[A]: “one or more processors;”

191. FarmVille discloses or renders obvious this element. Specifically, FarmVille discloses that “FarmVille is a Web-based game that you can play without inserting a disc or installing any programs to your hard drive. Your farm and the game program required to maintain it exist as part of a series of *online data centers* maintained by FarmVille’s publisher, Zynga.” (EX1004, 16.) “This farm, and the game itself, aren’t actually stored permanently on your computer, but exist on ‘the cloud’ of *FarmVille servers* maintained by developer Zynga.” (EX1004, 11.) A POSITA would have understood (and it would be obvious) that FarmVille servers would include one or more processors.

c. 14[B]: “and a memory storing instructions that, when executed by the one or more processors, cause the system to:”

192. FarmVille discloses or renders obvious this element. (*Supra* §§IX.A.2.a, IX.A.15.b.) A POSITA would have understood (and it would be obvious) that FarmVille servers would include a memory. Further, FarmVille states that “[y]our farm and the *game program* required to maintain it exist as part

of a series of online data centers maintained by FarmVille’s publisher, Zynga.” (EX1004, 16.) In other words, the FarmVille servers comprise “game program required to maintain [the farm],” which a POSITA would understand to include or be instructions—stored on FarmVille servers’ memory—that are executed by FarmVille servers’ processors to implement the game.

d. 14[C][1]: “provide access to a video gaming application operated in a cloud computing network to a plurality of computing devices;”

193. Farmville discloses this element for reasons stated above with respect to 1[A]. (*Supra* §IX.A.2.b.)

e. 14[C][2]: “enable a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network, the first computing device participating in the first gameplay via a first gaming platform;”

194. Farmville discloses this element for reasons stated above with respect to 1[B][1] and 1[B][2]. (*Supra* §§IX.A.2.c and IX.A.2.d.)

f. 14[C][3]: “enable a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network, the second computing device participating in the second gameplay via a second gaming platform;”

195. Farmville discloses this element for reasons stated above with respect to 1[C][1] and 1[C][2]. (*Supra* §§IX.A.2.e and IX.A.2.f.)

g. 14[C][4]: “receive one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;”

196. Farmville discloses this element for reasons stated above with respect to 1[D]. (*Supra* §IX.A.2.g.)

h. 14[C][5]: “determine an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service; and”

197. Farmville discloses this element for reasons stated above with respect to 1[E]. (*Supra* §IX.A.2.h.)

i. 14[C][6]: “modify one of the first gameplay and the second gameplay of the video gaming application based on the influence.”

198. Farmville discloses this element for reasons stated above with respect to 1[F]. (*Supra* §IX.A.2.i.)

16. Claim 15: “The system of claim 14, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

199. Farmville discloses this claim for reasons stated above with respect to claim 2. (*Supra* §IX.A.3.)

17. Claim 16: “The system of claim 14, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and wherein the first computing device is a personal computer and the second computing device is a mobile device.”

200. Farmville discloses this claim for reasons stated above with respect to claim 3. (*Supra* §IX.A.4.)

18. Claim 17: “The system of claim 16, wherein the first player and the second player have different levels of capability in the shared gameplay.”

201. Farmville discloses this claim for reasons stated above with respect to claim 4. (*Supra* §IX.A.5.)

19. Claim 18: “The system of claim 14, wherein the first gameplay and the second gameplay are a same game played by a same player via different platforms.”

202. Farmville discloses this claim for reasons stated above with respect to claim 5. (*Supra* §IX.A.6.)

20. Claim 19: “The system of claim 14, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

203. Farmville discloses this claim for reasons stated above with respect to claim 8. (*Supra* §IX.A.9.)

21. Claim 20: “The system of claim 14, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

204. Farmville discloses this claim for reasons stated above with respect to claim 11. (*Supra* §IX.A.12.)

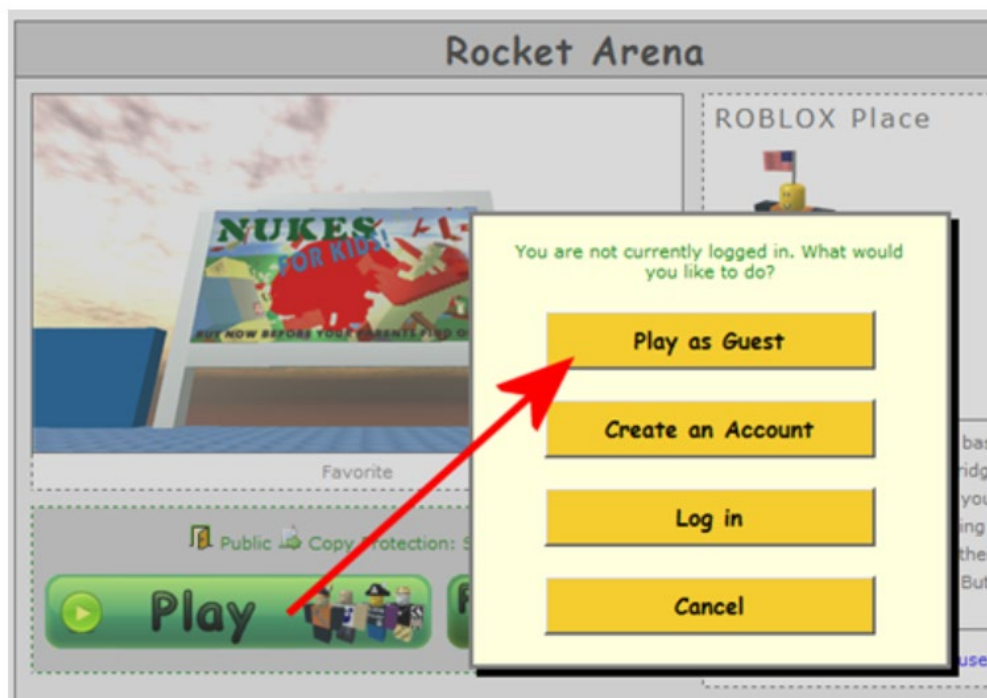
B. Ground 2: FarmVille and Shedletsky Render Obvious Claims 4 and 17.

1. Summary of Shedletsky

205. Shedletsky was published/made publicly available at least by March 5, 2012, before the earliest provisional application filing date of the '054 patent, and thus qualifies as prior art under §102(a). (EX1009, 1; EX1024, 1-2, 52-53.)

The Examiner never found, and Applicant never cited, Shedletsky during prosecution.

206. Shedletsky describes the “guest mode” feature of the game Roblox. Shedletsky describes that “[w]e’ve got two big features to announce in this release: guest mode and the ability to purchase ROBUX! . . . Some people want to try out ROBLOX to see if it’s any good before they take the time to make an account. A lot of game websites force you to create an account before you can even play their games to see if they are worth your time.” (EX1009, 1.)



207. Shedletsky describes that the guest player has fewer capabilities in the game compared to a player with a user account. “We think anyone who gets in-game and plays ROBLOX for 10 minutes is probably going to want to create a full

account (especially since it is free), *in order to get the benefits of membership, such as having your own place, collecting the daily login bonus, and being able to customize the look of their ROBLOXian.*” (EX1009, 1.)

208. Shedletsky describes that “[g]uest mode players appear in-game with the name ‘Guest ###’. They’re just like normal users, except they can only use Super Safe chat and *their stats don’t get logged from game to game.*” (EX1009, 1.)

2. A POSITA would have been motivated to combine FarmVille and Shedletsky.

209. It would have been obvious for a POSITA to combine Shedletsky’s “guest mode” with FarmVille, thereby adding a guest mode to FarmVille. FarmVille and Shedletsky are related to online video games and address how users with different statuses can interact with game features. FarmVille is a “[w]eb-based farming simulation game” in which users manage virtual farms, interact with neighbors, exchange gifts, provide help, participate in co-op jobs, and respond to social-network posts. (EX1004, 7, 9, 65-71, 201-206.) Shedletsky likewise describes an online video game, Roblox, and enables users to “[p]lay as [g]uest.” (EX1009, 1.) Shedletsky explains that the guest mode is for “people [who] want to try out ROBLOX to see if it’s any good before they take the time to make an account.” *Id.* Thus, FarmVille and Shedletsky are analogous to the ’054 patent, from the same field of endeavor, and all relate to the same technical problems of

addressing online game access, user participation, and how to encourage more users to interact with a game environment.

210. The FarmVille-Shedletsky combination would result in a system where Shedletsky's "guest mode" is added to FarmVille to allow broader participation in FarmVille, increase conversion of non-players into full players, and improve FarmVille's social mechanics. FarmVille requires both a Facebook account and a FarmVille account. (EX1004, 2.) In the combination, FarmVille would allow any Facebook user to play FarmVille in a guest mode without having to create a FarmVille account. (*See* EX1004.) The guest player would have limited capabilities, for example, they may not have their own farm or save their own stats but can help on the farms of other players (*e.g.*, help with barn-raising or participate in a co-op job, review the gaming environment). Thus, when a Facebook user interacts with a FarmVille content item, the FarmVille servers would additionally determine the Facebook user's gameplay status (*e.g.*, whether the Facebook user has a "guest mode" account and/or is indicating a desire to play in the guest mode) and determine the influence of the interaction based on that status.

211. A POSITA would have been motivated to make this combination because FarmVille already relied on social-network interactions and invitations to attract new users, but its disclosed system required a user to install the FarmVille

game and set up a farm before playing. (*See, e.g.*, EX1004, 19-23, 55-57.)

Shedletsky identifies a known problem with that kind of requirement: users may want to try an online game “before they take the time to make an account.”

(EX1009, 1.) A POSITA would have recognized that adding Shedletsky’s guest mode to FarmVille would reduce friction for new users to participate in FarmVille, ultimately leading to player conversion.

212. The combination would have provided predictable benefits. First, guest mode would allow broader FarmVille participation by any Facebook user. A Facebook user who sees a barn-raising request, co-op job notice, or other FarmVille-related social post would be able to participate in or access a limited FarmVille experience without first completing a full account setup. This would make FarmVille’s social content items more effective at attracting new players.

213. Second, the combination would improve conversion of non-players into full players. Shedletsky expressly teaches this benefit by explaining that “anyone who gets in-game and plays ROBLOX for 10 minutes is probably going to want to create a full account,” especially to obtain membership benefits.

(EX1009, 1.) A POSITA would have applied the same reasoning to FarmVille. Allowing a guest to view a friend’s farm and provide limited help would increase the likelihood that the guest would later create a full FarmVille account to obtain the benefits of full play, such as maintaining a personal farm and saving stats.

214. Third, the combination would provide higher entertainment value. FarmVille already teaches that having more neighbors and social interactions are beneficial, including receiving gifts, earning coins and XP, collecting bonuses, participating in co-op jobs, and completing neighbor-assisted tasks. FarmVille states that “[t]he more neighbors you have, the more opportunities you have to receive gifts, earn coins, collect bonuses, and build up your farm.” (EX1004, 51.) It also teaches that users rely on neighbors for co-op jobs, and that co-op farming is “one of the most social aspects of this already very social game.” (EX1004, 201.) Adding guest-mode interactions would increase the pool of potential helpers beyond existing FarmVille players and neighbors.

215. The combination would have been straightforward with a reasonable expectation of success. FarmVille already tracks whether a user is a Facebook friend, FarmVille player, neighbor, pending neighbor, gift recipient, co-op participant, or non-player invitee, etc. A POSITA would have recognized that adding a “guest mode” role is simply an additional status in the same type of user-status framework already used by FarmVille. The combination also would have been obvious to try. There are a finite number of predictable access levels for a game: full access, limited access (*e.g.*, due to role, account, payment, time), and no access. Shedletsky expressly teaches the limited guest-access mode. Applying Shedletsky’s known limited guest-access option to FarmVille would have been a

routine design choice among predictable alternatives for expanding the game's player base, and would improve FarmVille in the same way. Shedletsky's known benefits would prompt its application in the same field based on design incentives/market forces.

3. Claim 4: "The computer-implemented method of claim 3, wherein the first player and the second player have different levels of capability in the shared gameplay."

216. Claim 4 is obvious in view of FarmVille. (*Supra* §IX.A.5.) The FarmVille-Shedletsky combination also discloses this claim.

217. FarmVille provides different levels of capability in a shared gameplay. (*Supra* §IX.A.5.) Shedletsky provides an additional status for a given gameplay: a person playing in guest mode.

218. Shedletsky describes the "guest mode" feature of the game Roblox. Shedletsky describes that there is a list of features that are only available to players with a registered account, "such as having your own place, collecting the daily login bonus, and being able to customize the look of their ROBLOXian."

(EX1009, 1.)

4. Claim 17: "The system of claim 16, wherein the first player and the second player have different levels of capability in the shared gameplay."

219. The FarmVille-Shedletsky combination discloses this claim. (*Supra* §IX.B.3.)

C. Ground 3: FarmVille and Zynga Patent Render Obvious Claims 6-7

1. Summary of Zynga Patent

220. Zynga patent was filed on September 26, 2011, before the earliest provisional application filing date of the '054 patent, and thus qualifies as prior art under §102(e). (EX1008, 1.) The Examiner never found, and Applicant never cited, the Zynga patent during prosecution.

221. Zynga patent describes operating online games and explicitly mentions “Farmville.” (EX1008, 14:53.) Zynga patent describes operating the game based on user actions such as “plant[ing] a crop” and “build[ing] a farm,” specifically, “[a] game event may be an outcome of an engagement, a provision of access, rights and/or benefits, or the obtaining of some assets (e.g., health, money, strength, inventory, land, etc.). A game engine determines the outcome of a game event according to a variety of factors, such as the game rules, a player character's in-game actions, player character state, game state, interactions of other player characters, and random calculations. Engagements can include simple tasks (e.g., plant a crop, clean a stove), complex tasks (e.g., build a farm or business, run a café), or other events.” (*Id.*, 12:6-15.)

2. A POSITA would have been motivated to combine FarmVille and Zynga Patent.

222. At the time of the invention, it would have been obvious for a POSITA to combine FarmVille and Zynga patent. Both references disclose

mechanics of online video games created by Zynga. (EX1004, EX1008.) Zynga patent explicitly mentions “Farmville” and describes operating the game based on user actions such as “plant[ing] a crop” and “build[ing] a farm.” (EX1008, 14:53, 12:6-15.) Both relate to online video gaming applications with social-network integration, and more specifically to using social-network activities (*e.g.*, Facebook interactions) to affect gameplay. (EX1004, 53; EX1008, 8:60-61.) Thus, the references are analogous to the ’054 patent, are from the same field of endeavor, and address the same technical problem of using social-network interactions to drive or influence gameplay in an online video gaming application. (EX1001, Abstract.)

223. A POSITA would have been motivated to combine FarmVille and Zynga patent. FarmVille is generally focused on FarmVille’s user-facing gameplay experience, while Zynga patent describes implementation details and additional features of the gaming system. To the extent that FarmVille does not explicitly disclose a video gaming application providing access to multiple games (not conceded), Zynga Patent explicitly discloses “a player may play ***multiple games*** on game networking system 120*b*, which may maintain a single game account for the player with respect to all the games, or multiple individual game accounts for each game with respect to the player.” (EX1008, 4:7-16.) In the FarmVille-Zynga combination, a video gaming application developed by Zynga

would allow a player to access *multiple Zynga games* under either the same game account or multiple individual game accounts for each game.

224. The combination would predictably improve both the user experience and game performance by giving players one place to discover and launch games using a unified account, friends list, and rewards system. This approach would increase player retention through seamless cross-promotion, reduces customer acquisition costs by marketing new games to existing users, enables shared services such as authentication and notifications, and provides Zynga with better cross-game analytics and operational efficiency, while creating a more consistent and engaging ecosystem for players. These known benefits would have prompted a POSITA to apply the Zynga patent's teachings to FarmVille, because the combination merely applies Zynga patent's known techniques for operating a gaming system into Zynga's existing ecosystem. (See EX1008, 4:7-23.)

225. The known benefits of Zynga patent's multi-game system would prompt its application in the same field based on design incentives and market forces and would yield the predictable result of a scalable, multi-game networked architecture for operating FarmVille and other Zynga games through a unified system. Because both references involve Zynga online social games with social-network integration, a POSITA would have been motivated to use the known multi-game design of Zynga patent to improve FarmVille in the same way.

226. Further, it would have been obvious to try combining the teachings of FarmVille and Zynga patent. There were only a finite number of identified and predictable solutions for offering multiple games, as a unified system or as separate applications. Zynga patent demonstrated that an online game networking system can provide multiple online games and ensure a consistent gaming experience across multiple gameplay sessions and different games. (EX1008, 4:5-19.) Thus, the combination is straightforward and readily achievable by a POSITA, with a reasonable expectation of success.

3. Claim 6: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a same gaming platform.”

227. The FarmVille-Zynga combination discloses this claim.

228. Zynga patent specifies that “a player may play *multiple games* on game networking system 120*b*, which may maintain a single game account for the player with respect to all the games, or multiple individual game accounts for each game with respect to the player.” (EX1008, 4:12-16.) Thus, the combination discloses a unified Zynga video gaming application providing different games (FarmVille, other Zynga games) played by different players. These games can be via the same platform (*e.g.*, mobile app, Facebook, unified gaming website).

4. Claim 7: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a different gaming platform.”

229. The FarmVille-Zynga combination discloses this claim. As discussed above, the combination discloses a unified Zynga video gaming application providing different games (FarmVille, a different Zynga game) played by different players. (*Supra* §IX.C.3.) These games can be via different platforms (*e.g.*, mobile app, Facebook, unified gaming website).

D. Ground 4: FarmVille and Tweet Land Render Obvious Claims 1-20.

1. Summary of Tweet Land

230. Tweet Land was published/made publicly available at least by October 10, 2011, before the earliest provisional application filing date of the '054 patent, and thus qualifies as prior art under §102(a). (EX1005, EX1024, 1-2, 9-10.) The Examiner never found, and Applicant never cited, Tweet Land during prosecution.

231. Tweet Land describes a game called Tweet Land, “one of the world’s first *video game platforms* that plays with reality, or ‘Real Time Gaming’.” (EX1005, 1.) The game explores “[w]hat would happen if people’s social networks effected what happens in a video game[.]” *Id.* “In the Tweet Land universe you will be able to play several *videogames* but it will launch with two

initial games. A *rac*ing game called Route 140 and an *action game* called Love City.” (*Id.*, 2.)



(EX1019, 2; EX1005³, 2.)



³ EX1005 is the archived version of EX1019 on Internet Archive.

(EX1019, 3; EX1005, 3)

232. Tweet Land uses “real-time . . . *tweets* drawn from *Twitter*” to “trigger elements into the game.” (EX1005, 2; EX1014, 1.) It “reaches out into the vast ocean of *Twitter* and utilizes special keywords from *real tweets* to create things in the game.” (EX1005, 2; EX1014, 1.) Specifically, “every time someone in the world tweets something,” the tweets “affect the gameplay of Tweet Land by triggering certain action-keywords.” Examples of such action-keywords includes “car accident,” “meteor,” “shooting star,” “tsunami,” “volcano eruption,” “fireflies,” “zombie,” “beach,” “love,” “hate,” “shotgun,” and “lightsaber,” such that “[e]vents and gameplay are always changing.” (EX1005, 2; *see also* EX1011, 2 (“anyone’s tweets can affect your gameplay. The tweets used are chosen by the keywords they have.”))

233. For example, “if someone *tweets the word ‘meteor’* then a meteor will fly in from off screen[.]” (EX1014, 2.) In the figure below, a user (@someone) tweeted “*I just saw a huge meteor!*” In response, a meteor appears in the Tweet Land game.



(EX1019, 2; EX1005, 2)

234. In the figure below, a user (@zerocartin) tweeted “*Quake in Papua New Guinea! Is there any tsunami warning?*” In response, a tsunami appears in the Tweet Land game, as shown below.



(EX1014, 2)

2. A POSITA would have been motivated to combine FarmVille and Tweet Land.

235. At the time of the invention, it would have been obvious for a POSITA to combine FarmVille with Tweet Land. They are analogous art because they all relate to online video gaming applications with social network integration, and more specifically to using social network activities (*e.g.*, Facebook clicks, tweets) to affect gameplay. (EX1004, 53; EX1005, 2.) As discussed, “FarmVille is a Web-based farming simulation game produced by a gaming company called Zynga.” (EX1004, 7.) Tweet Land is a “video gam[ing] platform[] that plays with reality, or ‘Real Time Gaming’.” (EX1005, 1.) Both references are therefore from the same field of endeavor and relate to the same technical problems of using

social-network interactions to drive or influence gameplay in an online video gaming application, as well as game mechanics governing items or rewards acquisition and players interaction. (EX1001, Abstract.)

236. FarmVille already discloses Facebook-based interactions associated with FarmVille posts, including accepting gifts, bonuses, and items, adopting animals, helping with barn raising, accepting neighbor requests, inviting users to become FarmVille players, and joining co-op jobs. In FarmVille, those interactions are initiated when a user *clicks* a hyperlink or button in a Facebook post. Tweet Land discloses that social-network text-based *comments* containing keywords can themselves serve as gameplay inputs that trigger gameplay effects. (EX1005, 2.) A POSITA would have found it obvious to combine the references such that comments posted in response to FarmVille Facebook posts would trigger the same or additional gameplay effects to improve user interaction and social engagement.

237. Combining FarmVille and Tweet Land would result in a system where, instead of requiring a user to *click* a hyperlink in a Facebook news-feed post, the user can *comment* on the post to affect gameplay. For example, a comment such as “*#accept*” would accept a gift, bonus, item, neighbor request, or FarmVille invitation. A comment such as “*#adopt*” would adopt an animal for the user’s farm. A comment such as “*#barn*” would contribute toward a barn-raising

request. A comment such as “#*join*” would join a co-op job. In the same manner that FarmVille already determines gameplay effects based on Facebook clicks, the combined FarmVille-Tweet Land system would analyze the content of the comments (*i.e.*, text-based posts), identify the keywords as taught by Tweet Land, determine the corresponding gameplay influence, and modify the FarmVille environment accordingly.

238. Additionally or alternatively, combining the references would result in a system where comments as taught by Tweet Land would directly cause events or environmental changes to occur. For example, a Facebook comment containing “#*meteor*” on a FarmVille-related Facebook post would cause a meteor event to appear within the FarmVille environment (*e.g.*, in a farm). Similarly, a comment containing “#*love*” would trigger an award, bonus, or reward for the owner of the farm associated with the Facebook post or for the commenter (if the commenter is a FarmVille player). The FarmVille servers would receive the Facebook comment data, analyze the included keyword as taught by Tweet Land, determine the corresponding gameplay influence, and modify the FarmVille gaming application in response, consistent with the gameplay-affecting comment mechanisms taught by Tweet Land. Applying those teachings to FarmVille would predictably enable Facebook comments associated with FarmVille posts to trigger additional in-game events and application effects.

239. A POSITA would have been motivated to combine the references to reduce disruption to users interacting with FarmVille content on Facebook. In FarmVille, clicking hyperlinks in Facebook posts may redirect users away from the Facebook news feed (*e.g.*, into a separate confirmation page). By contrast, using Tweet Land’s comment-based approach would allow users to remain directly within the Facebook news-feed interface while still interacting with FarmVille gameplay content. Thus, users would participate in FarmVille-related gameplay actions simply by posting comments on Facebook posts without navigating away from the Facebook page they were already viewing. A POSITA would have recognized that reducing such navigation friction would improve usability, encourage more frequent interactions, and increase social-network engagement with FarmVille-related content.

240. A POSITA further would have recognized that Tweet Land’s comment-based interaction technique would expand the pool of users capable of influencing the FarmVille environment. FarmVille’s click-based interactions generally contemplated that Facebook users become FarmVille players, if not already, in order to affect the game. (EX1004, 66.) Tweet Land, however, teaches gameplay effects triggered by anyone on the social network “even if they are not playing or don’t know anything about Tweet Land.” (EX1005, 2.) Applying those teachings to FarmVille would allow any Facebook user capable of commenting on

a FarmVille-related Facebook post (*e.g.*, anyone who can view the post)—including users who do not play FarmVille—to influence the FarmVille environment through the types of keywords taught in Tweet Land. For example, a Facebook user who did not maintain a FarmVille account would post “#meteor” to affect the farm as taught by Tweet Land (although the user may still be required to have a FarmVille account for some other comments such as #accept to take effect in the game). A POSITA would have understood that enabling broader social-network participation would increase virality, social engagement, and visibility of FarmVille content across Facebook, ultimately increasing participation into the game.

241. FarmVille-Tweet Land combination would yield the predictable result of enhanced interactivity, increased social-network participation, and improved gameplay engagement. By incorporating Tweet Land’s comment-based gameplay techniques into FarmVille’s Facebook interaction framework, the combined system would provide a richer and more socially immersive gaming application for which ordinary Facebook comments directly affected gameplay outcomes, rewards, events, and in-game environmental changes. Such integration would encourage users and their social-network contacts to interact more frequently with FarmVille-related content because those interactions would produce gameplay effects without requiring users to leave the Facebook news-feed environment. The combination

therefore would have predictably improved the responsiveness, entertainment value, social reach, and commercial appeal of FarmVille's social-network-integrated gaming system using known and compatible techniques disclosed in the prior art.

242. The known benefits of Tweet Land would prompt the application of Tweet Land in the same field based on design incentives and market forces and yield the predictable result of enhancing the usability, accessibility, and social engagement of FarmVille's Facebook-integrated gaming system. Because both FarmVille and Tweet Land include social-network interactions that affect gameplay environments, a POSITA would have been motivated to use the known comment-based interaction techniques of Tweet Land to improve FarmVille in the same way. Further, it would have been obvious to try combining the teachings of FarmVille and Tweet Land. There were only a finite number of identified and predictable solutions for allowing social-network interactions to influence gameplay environments, including clicks and comments. The combination is straightforward and readily achievable by a POSITA, as demonstrated by successful implementations in the field. Prior art such as Tweet Land successfully demonstrated that comment-based interactions would directly and reliably influence gameplay events and environmental changes, and thus there would have been a reasonable expectation of success for combining the references.

3. Claim 1

a. 1[PR]: “A computer-implemented method using a plurality of computing devices in a cloud computing network, the method comprising:”

243. To the extent limiting, FarmVille-Tweet Land discloses this preamble for reasons stated above with respect to 1[PR] in Ground 1. (*Supra* §IX.A.2.a.)

b. 1[A]: “providing access to a video gaming application operated in the cloud computing network to the plurality of computing devices;”

244. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[A]in Ground 1. (*Supra* §IX.A.2.b.)

245. Tweet Land discloses a *video gaming application*, specifically, “one of the world’s first *video game platforms* that plays with reality, or ‘Real Time Gaming.’” (EX1005, 1) “In the Tweet Land universe you will be able to play several *videogames* but it will launch with two initial games. A *racine game* called Route 140 and an *action game* called Love City.” (*Id.*, 2; *see also* EX1014, 1.) A screenshot of Tweet Land’s two initial *videogames* is shown below.

INITIAL TWEETLAND GAMES



A race in the most
dangerous highway
of the Web



A city where
Love and Hate
finally face-off

(EX1019, 2; EX1005, 2)

c. 1[B][1]: “enabling a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network,”

246. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[B][1] in Ground 1. (*Supra* §IX.A.2.c.)

d. 1[B][2]: “the first computing device participating in the first gameplay via a first gaming platform;”

247. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[B][2] in Ground 1. (*Supra* §IX.A.2.d.)

e. 1[C][1]: “enabling a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network,”

248. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[C][1] in Ground 1. (*Supra* §IX.A.2.e.)

f. 1[C][2]: “the second computing device participating in the second gameplay via a second gaming platform;”

249. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[C][2] in Ground 1. (*Supra* §IX.A.2.f.)

g. 1[D]: “receiving one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;”

250. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[D] in Ground 1. (*Supra* §IX.A.2.g.) In the FarmVille-Tweet Land combination, the FarmVille servers would receive the interaction (*e.g.*, Facebook comments) to parse and determine influence. (*Supra* §IX.D.2 .)

h. 1[E]: “determining an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service;”

251. FarmVille-Tweet Land discloses this element for reasons stated above with respect to 1[E] in Ground 1. (*Supra* §IX.A.2.h.)

252. Further, Tweet Land discloses determining an *influence* to the gameplay based on the *interaction* via the social network service of the second user. “The games work very simply; every time someone in the world *tweets* something, their tweets affect the gameplay of Tweet Land by *triggering certain action-keywords*.” Examples of such action-keywords includes “car accident,”

“meteor,” “shooting star,” “tsunami,” “volcano eruption,” “fireflies,” “zombie,” “beach,” “love,” “hate,” “shotgun,” and “lightsaber,” such that “[e]vents and gameplay are always changing.” (EX1005, 2; *see also* EX1014, 1 (“Tweet Land . . . reaches out into the vast ocean of Twitter and utilizes special keywords from real tweets to create things in the game.”).)

253. For example, “if someone *tweets the word ‘meteor’* then *a meteor will fly in from off screen*[.]” (EX1014, 2.) In the figure below, a user (@someone) tweeted “*I just saw a huge meteor!*” In response, a meteor appears in the Tweet Land game.



(EX1019, 2; EX1005, 2)

254. In the figure below, a user (@zerocartin) tweeted “*Quake in Papua New Guinea! Is there any tsunami warning?*” In response, a tsunami appears in the Tweet Land game, as shown below.



(EX1014, 2)

255. As discussed above, in the FarmVille-Tweet Land combination, a user can *comment* on a FarmVille-related Facebook post to affect gameplay. (*Supra* §IX.D.2.) For example, a comment such as “*#accept*” would indicate the user’s desire to accept a gift, bonus, item, neighbor request, or FarmVille invitation, similar to a click. A comment such as “*#adopt*” would indicate the user’s desire to adopt an animal for the user’s farm, similar to a click. A comment such as “*#barn*” would indicate the user’s desire to contribute toward a barn-raising

request, similar to a click. A comment such as “*#join*” would indicate the user’s desire to join a co-op job, similar to a click. In the same manner that FarmVille already determines gameplay effects based on Facebook clicks, the combined FarmVille-Tweet Land system would analyze the content of the comments, identify the keywords as taught by Tweet Land, determine the corresponding gameplay influence as taught by FarmVille (*e.g.*, given eligibility conditions and rules of FarmVille), and modify the FarmVille application accordingly.

256. Additionally or alternatively, combining the references would result in a system where comments would directly cause events or environmental changes to occur. For example, a Facebook comment containing “*#meteor*” on a FarmVille-related Facebook post would cause a meteor event to appear within the FarmVille environment. Similarly, a comment containing “*#love*” would trigger an award, bonus, or reward for the owner of the farm associated with the Facebook post or for the commenter (if the commenter is a FarmVille player). The FarmVille servers would receive the Facebook comment data, analyze the included keyword, determine the corresponding gameplay influence as taught by Tweet Land, and modify the FarmVille gaming application in response, consistent with the gameplay-affecting comment mechanisms taught by Tweet Land.

257. It would have been obvious to combine the references. (*Supra* §IX.D.2.)

i. **1[F]: “and modifying one of the first gameplay and the second gameplay of the video gaming application based on the influence.”**

258. FarmVille-Tweet Land discloses this element as discussed above with respect to 1[F] in Ground 1 and 1[E] above. (*Supra* §§IX.A.2.i, IX.D.3.h, IX.D.2.)

4. Claim 2: “The computer-implemented method of claim 1, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

259. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 2 in Ground 1 above. (*Supra* §IX.A.3.)

5. Claim 3:

a. **3[A]: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and”**

260. FarmVille-Tweet Land discloses this element as discussed above with respect to Claim 3[A] in Ground 1 above. (*Supra* §IX.A.4.a.) In the combination, the second gameplay can be a Facebook user commenting on a FarmVille-related post.

b. **3[B]: “wherein the first computing device is a personal computer and the second computing device is a mobile device.”**

261. FarmVille-Tweet Land discloses this element as discussed above with respect to Claim 3[B] in Ground 1 above. (*Supra* §IX.A.4.b.)

6. Claim 4: “The computer-implemented method of claim 3, wherein the first player and the second player have different levels of capability in the shared gameplay.”

262. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 4 in Ground 1 above. (*Supra* §IX.A.5.)

7. Claim 5: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared game played by a same player via different platforms.”

263. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 5 in Ground 1 above. (*Supra* §IX.A.6.)

8. Claim 6: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a same gaming platform.”

264. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 6 in Ground 1 above. (*Supra* §IX.A.7.)

265. To the extent that FarmVille does not explicitly disclose that first gameplay and the second gameplay are *different games* played by different players (not conceded), Tweet Land discloses this. Tweet Land discloses that “[i]n the Tweet Land universe you will be able to play several *videogames* but it will launch with two initial games. A *racine game* called Route 140 and an *action game* called Love City.” (EX1005, 2.) For similar reasons as discussed, it would have been obvious to combine the references to provide a unified gaming application providing multiple games (*e.g.*, from the same developer). (*Supra* §IX.C.2.)

INITIAL TWEETLAND GAMES



(EX1019, 2; EX1005, 2.)

9. Claim 7: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a different gaming platform.”

266. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 7 in Ground 1 above. (*Supra* §IX.A.8.)

267. The FarmVille-Tweet Land combination further discloses this claim because Tweet Land discloses different games. (*Supra* §IX.D.8.)

10. Claim 8: “The computer-implemented method of claim 1, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

268. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 8 in Ground 1 above. (*Supra* §IX.A.9.)

11. Claim 9: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social

network service that enables users of the video gaming application to send text-based posts.”

269. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 9 in Ground 1 above. (*Supra* §IX.A.10.)

12. Claim 10: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social network service to enable text-based posts to be broadcasted for the event from one of the first gameplay and the second gameplay.”

270. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 10 in Ground 1 above. (*Supra* §IX.A.11.)

13. Claim 11: “The computer-implemented method of claim 1, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

271. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 11 in Ground 1 above. (*Supra* §IX.A.12.) In the combination, the social network activities further include comments.

14. Claim 12: “The computer-implemented method of claim 11, wherein the social network application is included in the video gaming application.”

272. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 12 in Ground 1 above. (*Supra* §IX.A.13.)

15. Claim 13: “The computer-implemented method of claim 11, wherein the social network application is a stand-alone third-party application coupled to the video gaming application.”

273. FarmVille-Tweet Land discloses this claim as discussed above with respect to Claim 13 in Ground 1 above. (*Supra* §IX.A.14.)

16. Claim 14:

a. 14[PR]: “A system for hosting and providing a video gaming environment to one or more users, comprising:”

274. To the extent limiting, FarmVille-Tweet Land discloses this preamble as discussed above with respect to 14[PR] in Ground 1 above. (*Supra* §IX.A.15.a.)

b. 14[A]: “one or more processors;”

275. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[A] in Ground 1 above. (*Supra* §IX.A.15.b.)

c. 14[B]: “and a memory storing instructions that, when executed by the one or more processors, cause the system to:”

276. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[B] in Ground 1 above. (*Supra* §IX.A.15.c.)

d. 14[C][1]: “provide access to a video gaming application operated in a cloud computing network to a plurality of computing devices;”

277. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[C][1] in Ground 1 above. (*Supra* §IX.A.15.d.)

e. 14[C][2]: “enable a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network, the first computing device participating in the first gameplay via a first gaming platform;”

278. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[C][2] in Ground 1 above. (*Supra* §IX.A.15.e.)

f. 14[C][3]: “enable a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network, the second computing device participating in the second gameplay via a second gaming platform;”

279. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[C][3] in Ground 1 above. (*Supra* §IX.A.15.f.)

g. 14[C][4]: “receive one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;”

280. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[C][4] in Ground 1 and 1[D] above. (*Supra* §§IX.A.15.g , IX.D.3.g.)

h. 14[C][5]: “determine an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service; and”

281. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[C][5] in Ground 1 and 1[E] above. (*Supra* §§IX.A.15.h, IX.D.3.h.)

i. 14[C][6]: “modify one of the first gameplay and the second gameplay of the video gaming application based on the influence.”

282. FarmVille-Tweet Land discloses this element as discussed above with respect to 14[C][6] in Ground 1 and 1[F] above. (*Supra* §§IX.A.15.i, IX.D.3.i.)

17. Claim 15: “The system of claim 14, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

283. FarmVille-Tweet Land discloses this claim for reasons stated above with respect to claim 2. (*Supra* §IX.D.4.)

18. Claim 16: “The system of claim 14, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and wherein the first computing device is a personal computer and the second computing device is a mobile device.”

284. FarmVille-Tweet Land discloses this claim for reasons stated above with respect to claim 3. (*Supra* §IX.D.5.)

19. Claim 17: “The system of claim 16, wherein the first player and the second player have different levels of capability in the shared gameplay.”

285. FarmVille-Tweet Land discloses this claim for reasons stated above with respect to claim 4. (*Supra* §IX.D.6.)

20. Claim 18: “The system of claim 14, wherein the first gameplay and the second gameplay are a same game played by a same player via different platforms.”

286. FarmVille-Tweet Land discloses this claim for reasons stated above with respect to claim 5. (*Supra* §IX.D.7.)

21. Claim 19: “The system of claim 14, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

287. FarmVille-Tweet Land discloses this claim for reasons stated above with respect to claim 8. (*Supra* §IX.D.10.)

22. Claim 20: “The system of claim 14, wherein the video gaming application is linked with a social network application that enables

social network activities to affect one of the first gameplay and the second gameplay.”

288. Farmville-Tweet Land discloses this claim for reasons stated above with respect to claim 11. (*Supra* §IX.D.13.)

E. Ground 5: Barclay '019 Renders Obvious Claims 1-20

1. Summary of Barclay '019

289. Barclay '019 was filed on March 2, 2012, before the earliest provisional application filing date of the '054 patent, and thus qualifies as prior art under §102(e). (EX1006, 1.) The Examiner never found, and Applicant never cited, Barclay '019 during prosecution.

290. Barclay '019 provides a *video gaming application*. For example, “the wagering game unit [] can present wagering games, such as *video poker, video black jack, video slots, video lottery*, reel slots, etc., in whole or part.” (EX1006, 22:25-27.) FIG. 3 shows an exemplary *video gaming application*.

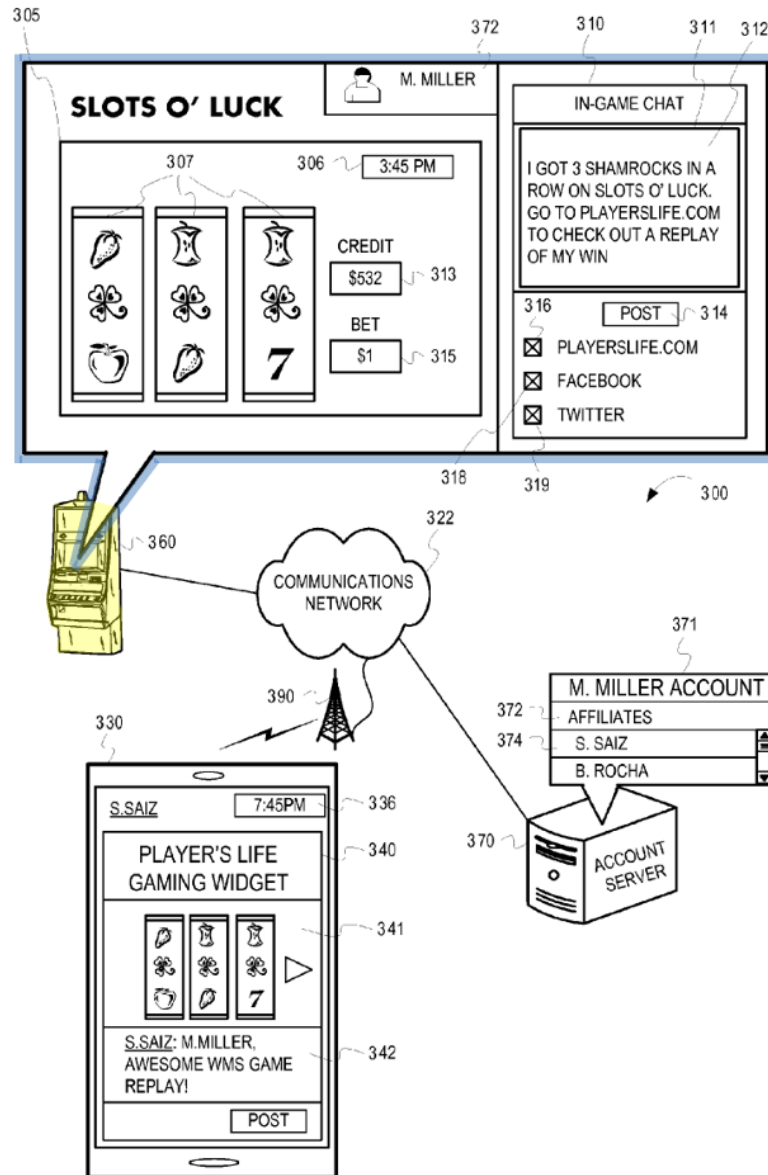


FIG. 3

291. In Barclay '019, a *video game player* can make a *post about gameplay results* on a *social network*. Referring to FIG. 3, a “*player [M. Miller]* can receive a specific gaming result (e.g., a random result of *three shamrocks in a row* via a combination of symbols on the reels 307).” (EX1006, 9:40-44.) The “*player* can activate the post control 314 (e.g., via button press, via touch-screen,

etc.) which publishes the *message 312* to one or more *social networking venues* (e.g., to *Playerslife.com*, to *Facebook.com*, to *Twitter.com*, etc.). . . .” (*Id.*, 9:48-52.) Referring to FIG. 3, the *gameplay result (three shamrocks in a row)* is posted on *Playerslife*, as shown on *S. Saiz*’s mobile device.

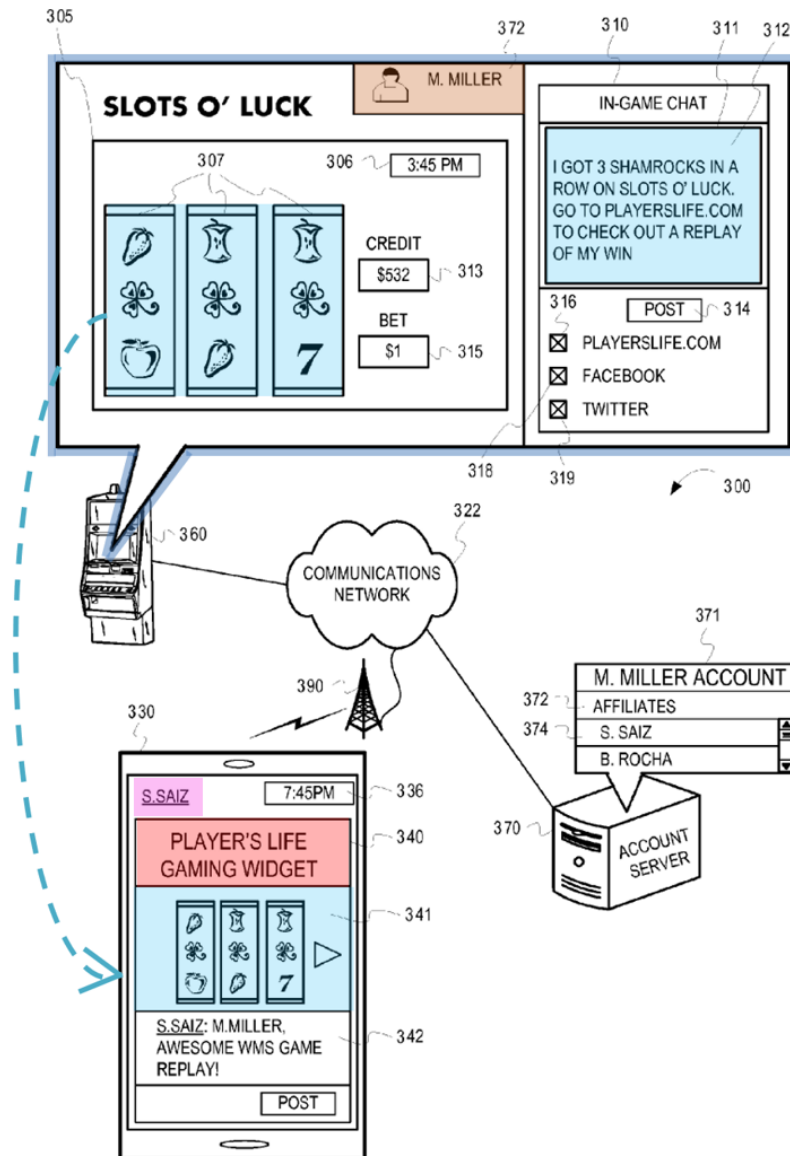


FIG. 3

292. A second user can *comment* on the post to *affect* the video gaming environment. A “social contact of the first user (e.g., a second user, S. Saiz, who is a friend of the first user, Marcus Miller), may view a publication of the message 312 via the mobile device 330” and “post[] a *comment 342*.” (EX1006,10:1-11.) “The *comment 342* includes the key phrase 132C (i.e., the phrase ‘WMS game replay’). The server 150, for example, may *award the second user* (e.g., via user account 374) the default point value 133C for the usage of the key phrase 132C.” (EX1006, 10:11-15.)

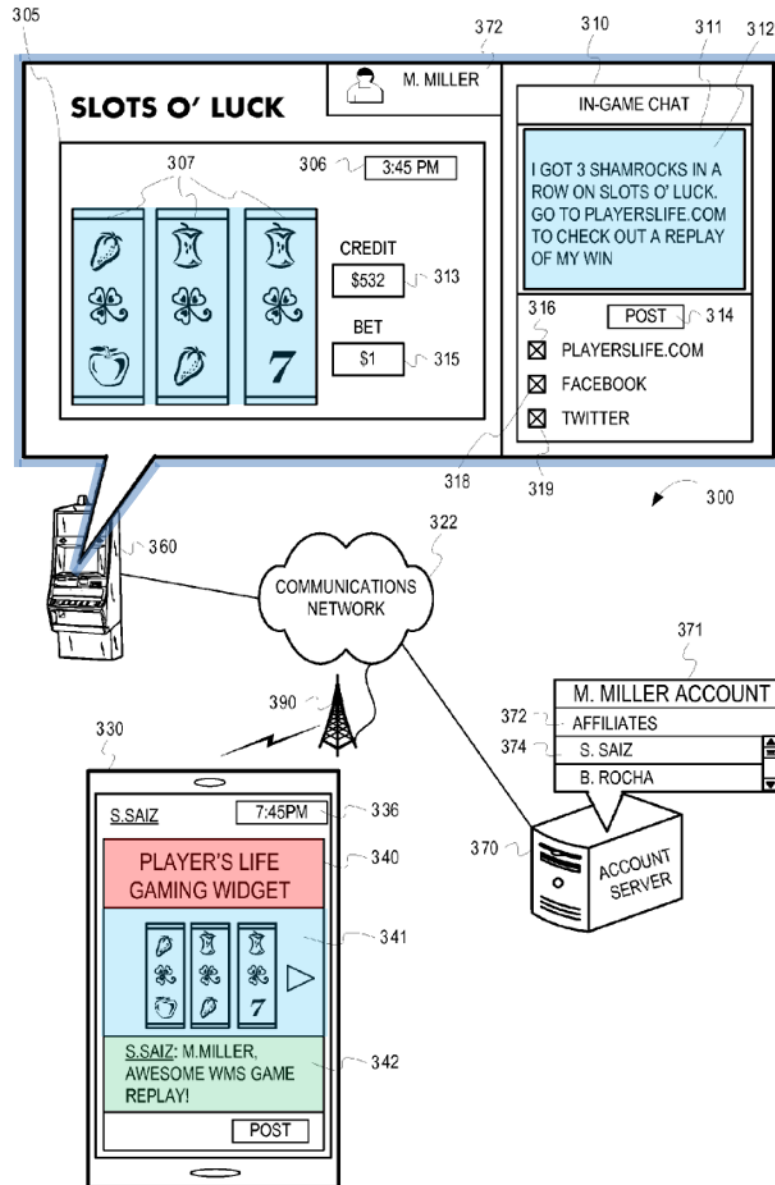


FIG. 3

293. Barclay '019 discloses a *gaming server* that performs the operations above. For example, as shown in FIG. 1, to determine how a social network comment affects the game, “the *server 150* can parse the message [] and search for first phrases (e.g., words or combinations of words) that match, or are substantially

similar to, second phrases from a group, or library, of key words or phrases, as indicated in a *list 130*.” (EX1006, 3:32-36.)

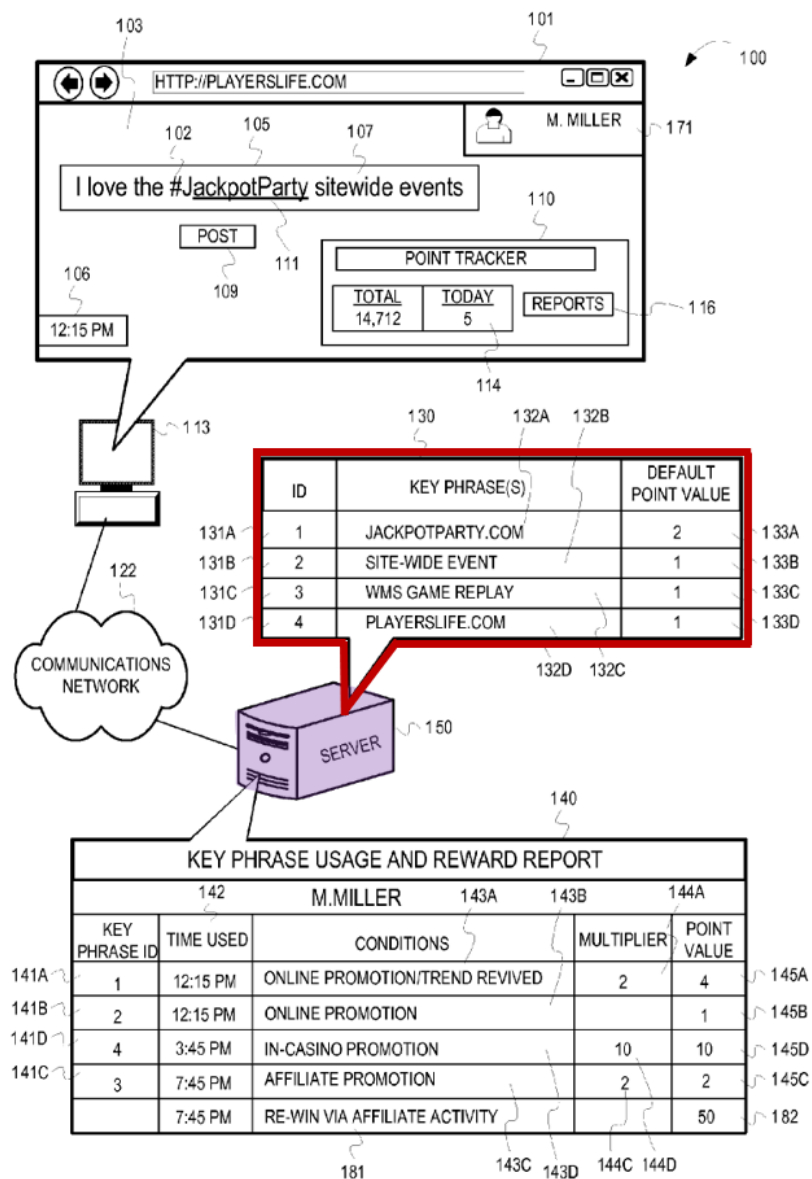


FIG. 1

294. Barclay '019 discloses numerous ways a social-network interaction such as *comments*, *clicks*, and *views* can affect the game. For example, “if enough users *click on* the post of *the message 312*, or if the first user can get enough other

users to register for an online account to see the posted message 312, the first user may ‘*re-win*’ the *wagering game win*.” (EX1006, 10:31-34.) As another example, “[t]he server 150 can track a number of times that other users *activate* the *link 111* and visit the website. The sever 150 can *award points* that vary in value based on the number of activated links to the online gaming venue. . . .” (*Id.*, 5:18-21.) As another example, “the first user *receives a bonus reward in the wagering game 305 and/or receives an award of points* (e.g., wins a total award value 182 in the report 140 in FIG. 1, because the condition 181 indicated that a sufficient number of affiliates, such as S. Saiz, *viewed* the *game replay 341*).” (*Id.*, 10:26-30.)

2. Claim 1

a. 1[PR]: “A computer-implemented method using a plurality of computing devices in a cloud computing network, the method comprising:”

295. To the extent limiting, Barclay ’019 discloses this preamble.

296. First, Barclay ’019 discloses a plurality of *computing devices*. For example, Barclay ’019 discloses “controlling and rewarding gaming socialization in a network wagering venue (e.g., an online casino, a wagering game website, a wagering network, etc.) using a communication network, such as the communications network 122 . . . Multiple users can be connected to the networks via *computing devices*.” (EX1006, 5:29-34, 5:40-41.)

297. Barclay '019 provides examples of such computing devices, for example, with reference to the system architecture diagram FIG. 8. “The wagering game system architecture 800 can also include the *client 860* configured to present wagering games and receive and transmit information to track and reward player activity. The client 860 can be *a computer system, a personal digital assistant (PDA), a cell phone, a laptop, a wagering game machine, or any other device or machine that is capable of processing information, instructions, or other data provided via the communications network 822.*” (EX1006, 15:38-45; *see also id.* 19:8-16 (“the client 860 can take the form of a *wagering game machine*. Examples of wagering game machines can include *floor standing models, handheld mobile units, bar-top models, workstation-type console models, surface computing machines*, etc. Further, wagering game machines can be primarily dedicated for use in conducting wagering games, or can include non-dedicated devices, such as *mobile phones, personal digital assistants, personal computers*, etc.”), 19:50-24:54, FIGS. 9-12.)

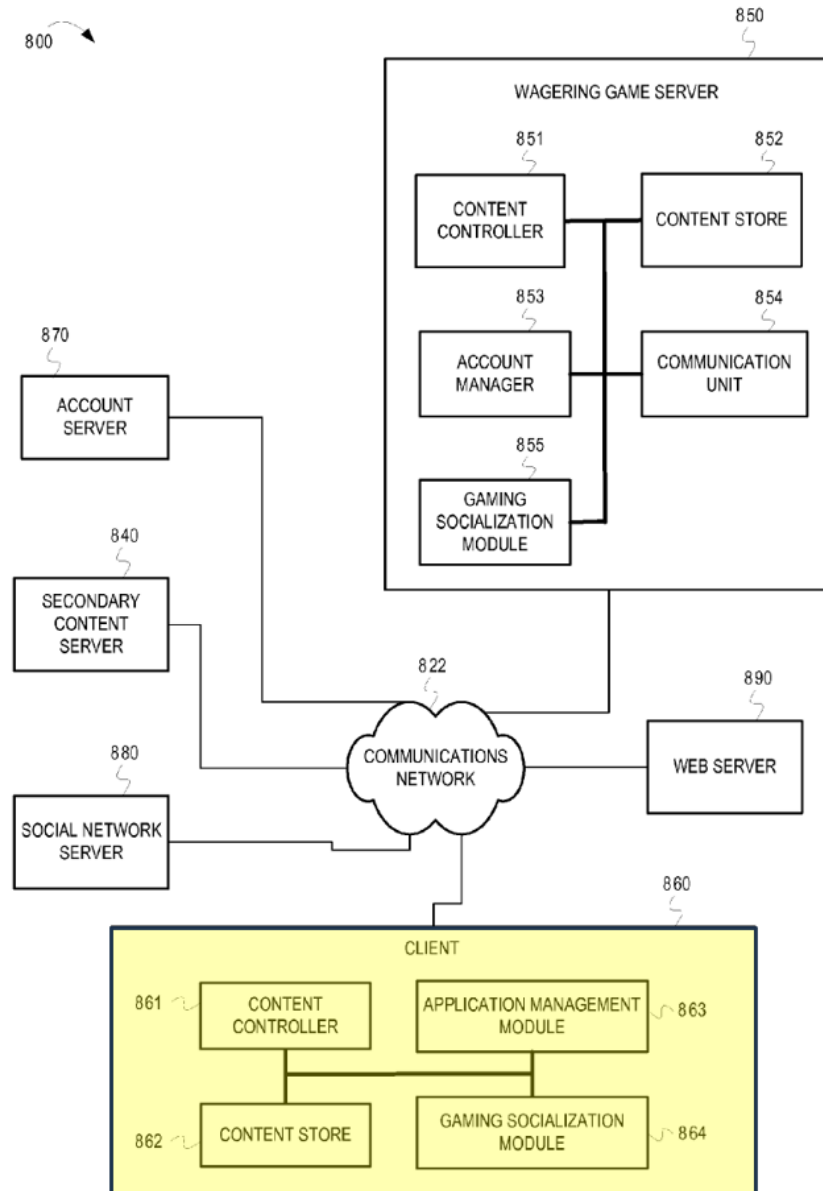


FIG. 8

298. Second, Barclay '019 discloses that the plurality of *computing devices* operates in a *cloud computing network*, consistent with the '054 patent. FIG. 1 of the '054 patent depicts a system of interconnected computers (*e.g.*, servers, user devices) that communicate via Networks 105a-n, which “may comprise . . . the Internet.” (EX1001, 10:54-62, 12:59-62.)

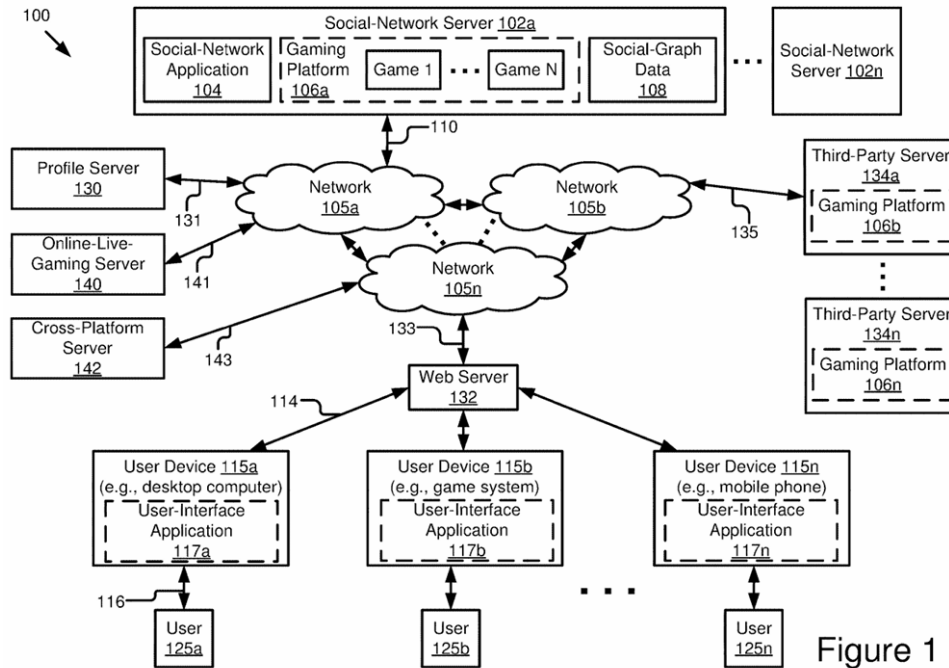


Figure 1

299. Consistent with the '054 patent, Barclay '019 discloses a system of interconnected computers, including servers and user devices, that communicate via the Internet. For example, FIG. 8 below depicts “a *wagering game system architecture 800*,” which includes a system of interconnected computers such as servers (*e.g.*, wagering game server, account server, secondary content server, social network server, web server) and user devices (*e.g.*, client 860) that communicate via communications network 822. (EX1006, 14:50-55, 15:3-7; 15:38-41, 17:19-25, 18:17-21, 18:34-39, FIG. 8, 17:48-51, 5:34-40.)

“Embodiments can be presented over any type of communications network that provides access to wagering games, such as *a public network (e.g., a public wide-area-network, such as the Internet)*, a private network (*e.g., a private local-area-*

network gaming network), a file sharing network, a social network, etc., or any combination of networks.” (*Id.*, 5:34-40; *see also id.*, 17:51, 18:39.) A POSITA would understand, and it would be obvious, that system 800 forms a cloud computing network because it has a network of devices performing computing tasks in the cloud (*e.g.*, the Internet).

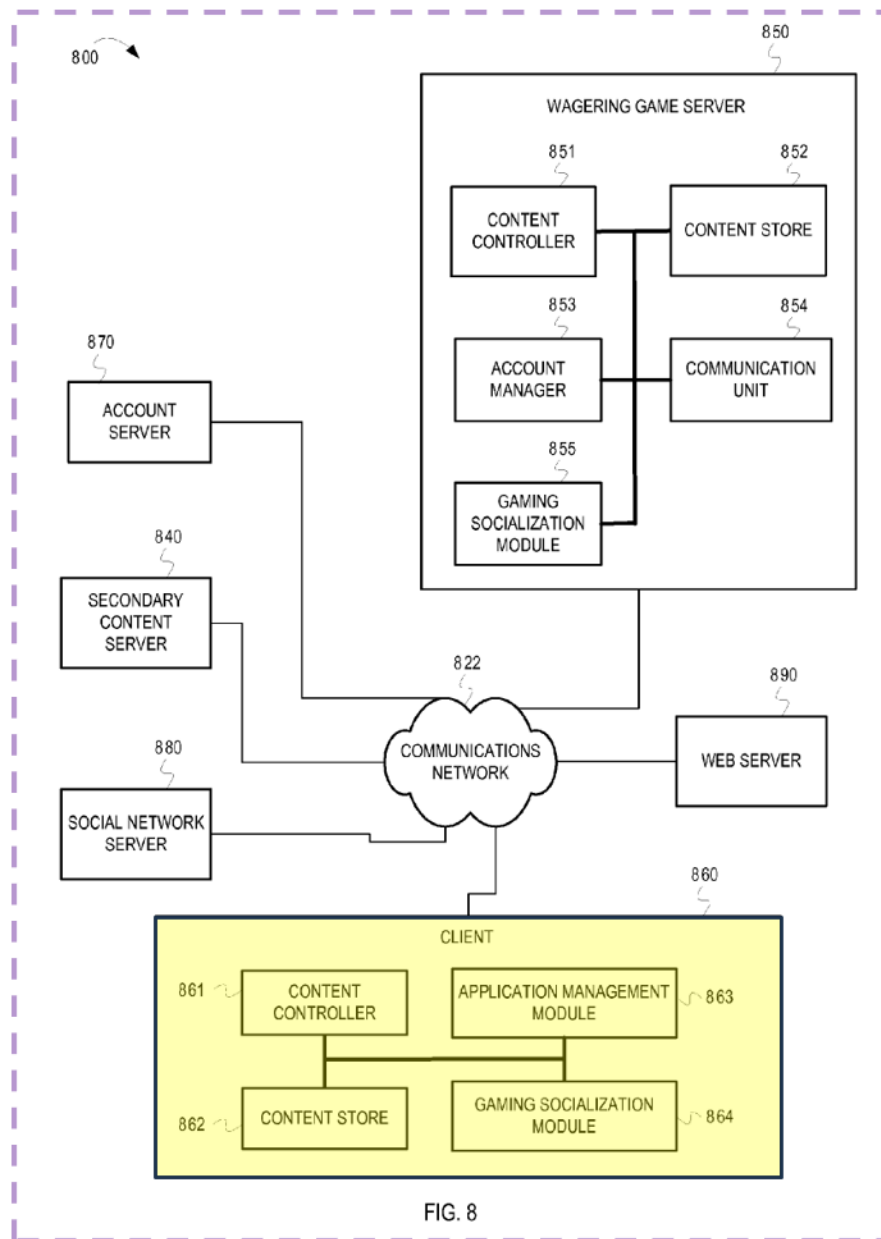


FIG. 8

300. And as shown in FIG. 8, each computing device (e.g., client 860) operates in the *wagering game system architecture 800*. Referring to FIG. 8, “[t]he wagering game system architecture 800 can also include a wagering game server 850 configured to control wagering game content, provide random numbers, and communicate wagering game information, account information, and other information to and from a *client 860*. The wagering game server 850 can include a content controller 851 configured to *manage and control content for the presentation of content on the client 860*. For example, the content controller 851 can generate game results (e.g., win/loss values), including win amounts, for games played on the client 860. The content controller 851 can communicate the game results to the client 860. The content controller 851 can also generate random numbers and provide them to the client 860 so that the client 860 can generate game results. The wagering game server 850 can also include a content store 852 configured to contain content to present on the client 860.” (EX1006, 15:3-18; *see also id.*, 15:18-37, 19:17-31; 19:34-36, 2:66-3:1.)

301. Further, “wagering game system architecture 800 can also include a web server 890 configured to control and present an online website that hosts wagering games. The web server 890 can also be configured to *present multiple wagering game applications on the client 860 via a wagering game website*, or other gaming-type venue accessible via the Internet. The web server 890 can host

an online wagering website and/or a social networking website.” (EX1006, 18:34-41; *see also id.*, 17:48-51.)

302. Barclay '019 discloses a computer-implemented method for performing its operations. (*See, e.g.*, EX1006, claims 1-6, 21, 24, 20:24, 23:16.)

b. 1[A]: “providing access to a video gaming application operated in the cloud computing network to the plurality of computing devices;”

303. Barclay '019 discloses this element.

304. First, Barclay '019 discloses providing access to a *video gaming application*. FIG. 3 (below) depicts “a wagering game system (‘system’) 300 includes a wagering game machine 360,” which is shown to provides access to a *video gaming application*. (EX1006, 9:12-13.) Barclay '019 states that “the wagering game unit [] can present wagering games, such as *video poker, video black jack, video slots, video lottery*, reel slots, etc., in whole or part.” (EX1006, 22:25-27; *see also id.* 23:17-22 (“the wagering game machine 1200 can be an electromechanical wagering game machine configured to play mechanical slots, or it can be an electronic wagering game machine configured to *play video casino games, such as blackjack, slots, keno, poker, blackjack, roulette, etc.*”), 19:17-31.)

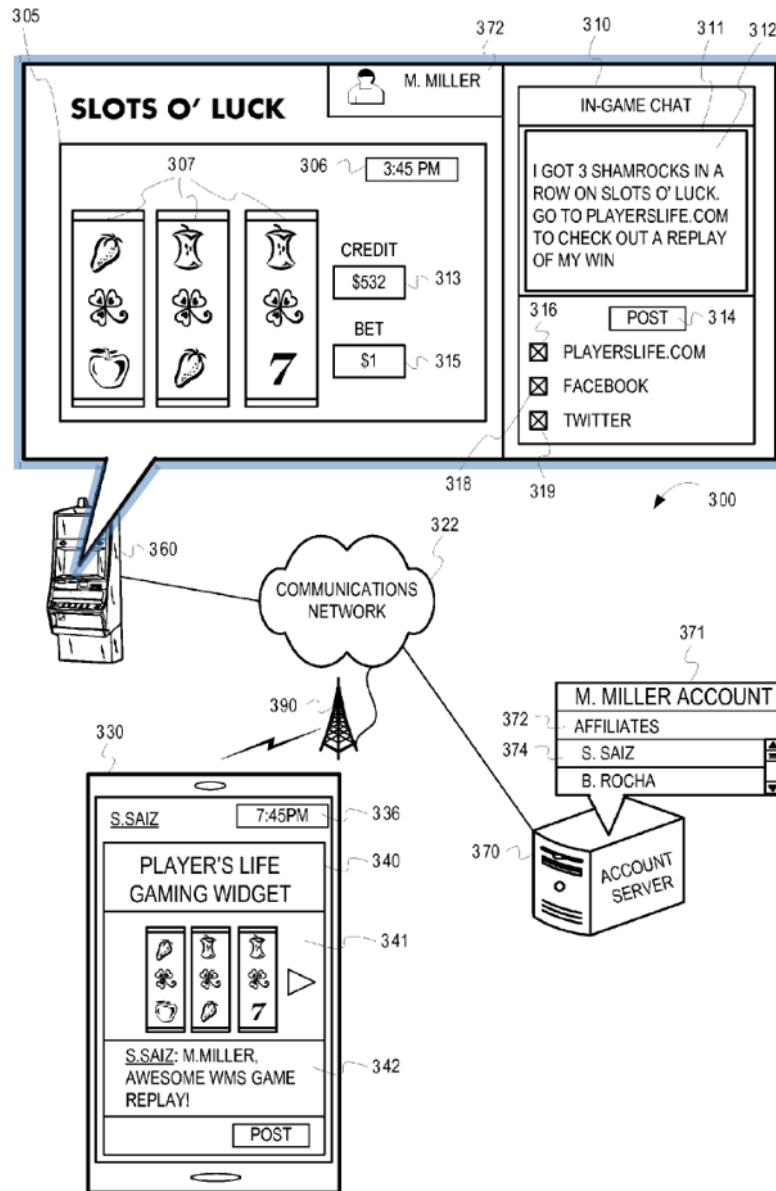


FIG. 3

305. Barclay '019 explains that its games are *gaming application(s)*. “The client 860 can also include an *application management* module 863 configured to manage multiple instances of *gaming applications*. For example, the application management module 863 can be configured to launch, load, unload and control applications and instances of applications. The application management module

863 can launch different software players (e.g., a Microsoft® Silverlight™ player, an Adobe® Flash® player, etc.) and manage, coordinate, and prioritize what the software players do. The application management module 863 can also coordinate instances of server applications in addition to local copies of applications. The application management module 863 can control window locations on a wagering game screen or display for the *multiple gaming applications*. In some embodiments, the application management module 863 can manage window locations on multiple displays including displays on devices associated with and/or external to the client 860 (e.g., a top display and a bottom display on the client 860, a peripheral device connected to the client 860, a mobile device connected to the client 860, etc.). The application management module 863 can manage priority or precedence of client applications that compete for the same display area. For instance, the application management module 863 can determine each client application's precedence. The precedence may be static (i.e. set only when the client application first launches or connects) or dynamic. The applications may provide precedence values to the application management module 863, which the application management module 863 can use to establish order and priority. The precedence, or priority, values can be related to tilt events, administrative events, primary game events (e.g., hierarchical, levels, etc.), secondary game events, local bonus game events, advertising events, etc. As each client application runs, it can

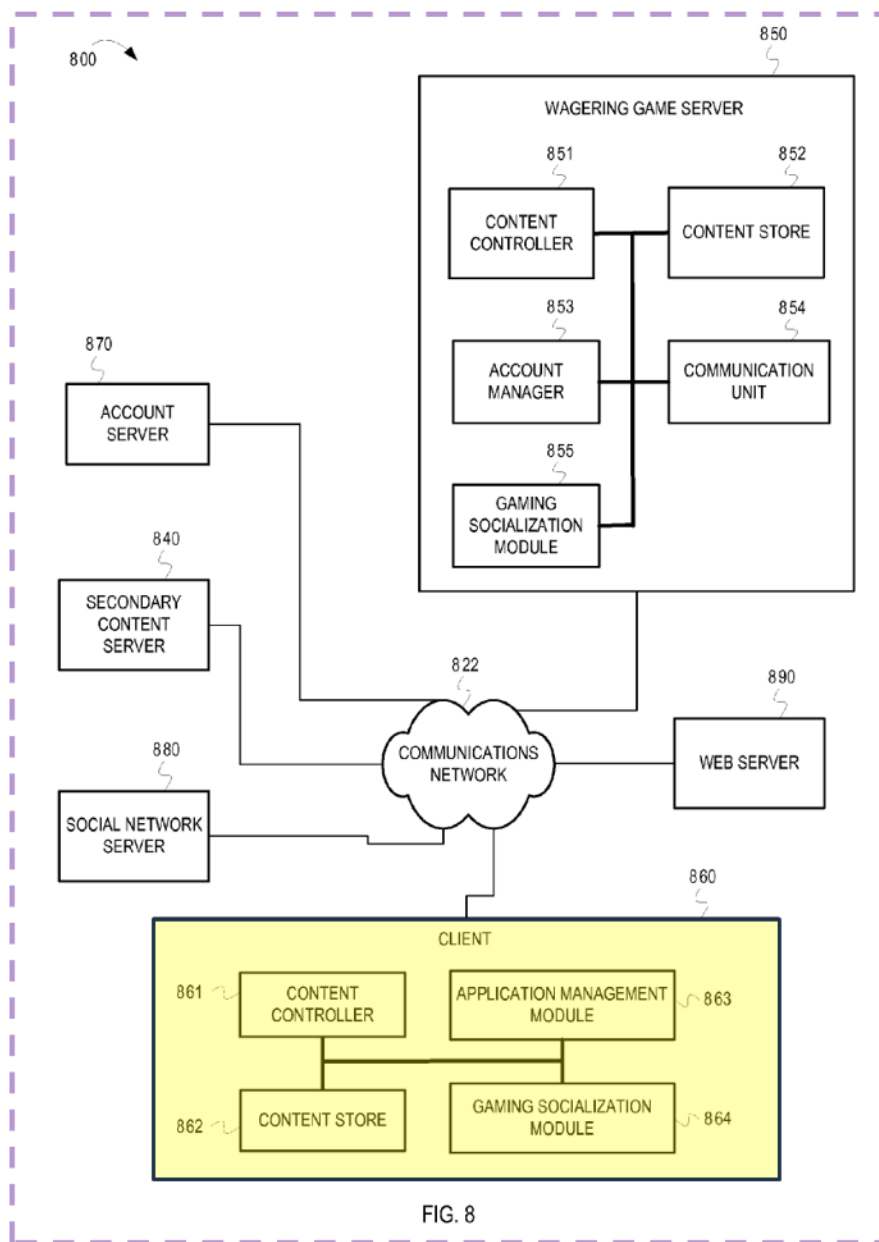
also inform the application management module 863 of its current presentation state. The applications may provide presentation state values to the application management module 863, which the application management module 863 can use to evaluate and assess priority.” (EX1006, 15:52-16:20.) “The application management module 863 can enable many-to-many messaging distribution and can enable the multiple applications to communicate with each other in a cross-manufacturer environment at the client application level. For example, multiple gaming applications on a wagering game machine may need to coordinate many different types of gaming and casino services events (e.g., financial or account access to run spins on the base game and/or run side bets, transacting drink orders, tracking player history and player loyalty points, etc.).” (*Id.*, 16:65-17:7.)

306. Further, Barclay ’019 discloses that both the secondary content server 840 and web server 890 “can also be configured to present multiple *wagering game applications* on the *client 860*.” (EX1006, 18:36-39, 17:48-51.) “The secondary content server 840 can also be configured to present multiple wagering game applications on the client 860 via a wagering game website, or other gaming-type venue accessible via the Internet. The secondary content server 840 can host an online wagering website and/or a social networking website. The secondary content server 840 can include other devices, servers, mechanisms, etc., that provide functionality (e.g., controls, web pages, applications, etc.) that web users

can use to connect to a social networking application and/or website and utilize social networking and website features (e.g., communications mechanisms, applications, etc.).” (*Id.*, 17:48-59.)

307. Second, Barclay ’019 discloses that the *video gaming application* operates in the *cloud computing network*. As discussed, Barclay ’019 discloses a cloud computing network (“*wagering game system architecture 800*”) comprising a system of interconnected computers (e.g., servers and user devices such as *client 860*). (*Supra* §IX.E.2.a). Various servers in the *wagering game system architecture 800* operate the *video gaming application*. For example, *wagering game system architecture 800* includes “a wagering game server 850 configured to *control wagering game content, provide random numbers, and communicate wagering game information*, account information, and other information to and from a client 860. The wagering game server 850 can include a content controller 851 configured to *manage and control content* for the presentation of content on the client 860. For example, the content controller 851 can *generate game results (e.g., win/loss values), including win amounts*, for games played on the client 860. The content controller 851 can communicate the game results to the client 860. The content controller 851 can also *generate random numbers* and provide them to the client 860 so that the client 860 can generate game results.” (EX1006, 15:3-

16; *see also id.*, 17:19-18:16, 18:34-56.) Further, the social network server hosting the social network applications operates in the *cloud computing network*.



308. Third, Barclay '019 provides access to the *video gaming application* to the plurality of *computing devices*. As discussed above, Barclay '019 discloses a plurality of *computing devices*. (*Supra* §IX.E.2.a.) “Multiple users can be

connected to the networks via *computing devices*.” (EX1006, 5:29-34, 5:40-41.)

“The client 860 can be a computer system, a personal digital assistant (PDA), a cell phone, a laptop, a wagering game machine, or any other device or machine that is capable of processing information, instructions, or other data provided via the communications network 822.” (EX1006, 15:38-45.) Barclay ’019 discloses that “the *client 860* [is] configured to present *wagering games*” and the provision of “multiple *wagering game applications* on the *client 860* via a wagering game website, or other gaming-type venue accessible via the *Internet*.” (EX1006, 15:38-41, 18:36-39, 17:48-51.) Further, “the client 860 can take the form of a wagering game machine. Examples of wagering game machines can include floor standing models, handheld mobile units, bar-top models, workstation-type console models, surface computing machines, etc. Further, wagering game machines can be primarily dedicated for use in conducting wagering games, or can include non-dedicated devices, such as mobile phones, personal digital assistants, personal computers, etc.” (*Id.*, 19:8-16.) Thus, Barclay ’019 discloses providing access to *video gaming application* to the plurality of *computing devices* (e.g., client 860).

c. 1[B][1]: “enabling a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network,”

309. Barclay ’019 discloses this element.

310. First, Barclay '019 enables a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application. As discussed above, Barclay '019 discloses a plurality of computing devices (e.g., client 860) for presenting wagering games. (*Supra* §§IX.E.2.a-IX.E.2.b.) A POSITA would understand that any of these devices is enabled to participate in a gameplay of the video gaming application.

311. For example, Barclay '019 discloses that “[a]ny individual with a ***personal computing device*** (e.g., a personal computer, a laptop, a personal digital assistant, a cell phone, etc.) can connect to the Internet and play wagering games.” (EX1006, 1:39-42.) In FIG. 3, the wagering game machine 360 is an example “first computing device.” “The user can login to the wagering game machine 360 via a player account 317, indicated via the player login console 372, and play the ***wagering game 305*** via a wagering game session.” (EX1006, 9:33-36.) “The ***wagering game 305*** may be a slot game that includes reels 307, a bet meter 315, a credit meter 313, etc.” (*Id.*, 9:32-33.)

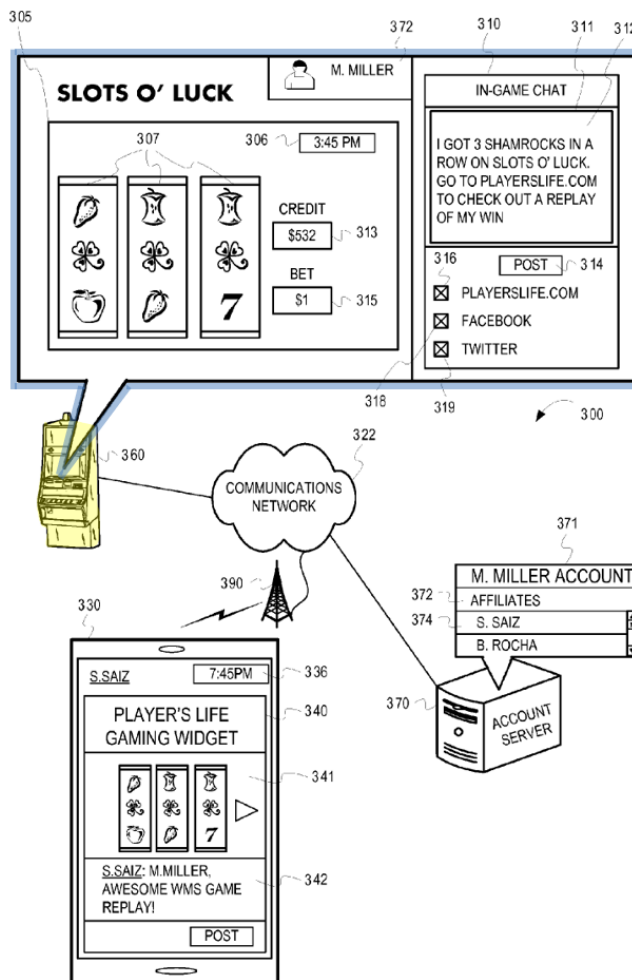


FIG. 3

312. Further, as discussed, Barclay '019's *video gaming application* operates in the *cloud computing network* (e.g., wagering game system architecture 800). (*Supra* §§IX.E.2.a-IX.E.2.b.) Thus, it follows that Barclay '019 enables participation in a first gameplay of the video gaming application via the *cloud computing network*. FIG. 3 shows a user (M. Miller) has access to the *wagering game* via the wagering game machine 360. The access is provided by “a *gaming server*, such as with the *server 150 described in FIG. 1*,” which controls many aspects of the wagering game. (EX1006, 9:21-22; *see also id.*, 19:24-28 (“the

wagering game server can perform functions such as determining game outcome or managing assets, while the clients can present a graphical representation of such outcome or asset modification to the user (e.g., player).”), 15:3-37.)

d. 1[B][2]: “the first computing device participating in the first gameplay via a first gaming platform;”

313. Barclay ’019 discloses this element. First, Barclay ’019 states that its system supports multiple platforms. “For example, the application management module 863 can perform rendering operations for *presenting applications of varying platforms*, formats, environments, programming languages, etc.” (EX1006, 16:52-55.) Further, “[t]he application management module 863 can include a portable virtual machine capable of *generating and executing code for the varying platforms*, formats, environments, programming languages, etc.” (EX1006, 16:62-65.)

314. Claim 2 of the ’054 patent recites that “a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.” (EX1001, claim 2.)

315. Consistent with the ’054 patent, Barclay ’019 discloses a gaming platform that is a mobile device providing gameplay. As discussed, Barclay ’019 discloses that “[t]he client 860 can be . . . a *personal digital assistant (PDA)*, a *cell phone*, a laptop” (*Supra* §§IX.E.2.a-IX.E.2.c ; EX1006, 15:41-42.) “[T]he client 860 can take the form of a wagering game machine . . . wagering game

machines can be primarily dedicated for use in conducting wagering games, or can include non-dedicated devices, such as *mobile phones, personal digital assistants, personal computers, etc.*” (EX1006, 19:9-16.) The mobile phone is a gaming platform because it provides the games and allows gameplay on the phone.

316. Barclay '019 also discloses a gaming platform that is a game console. For example, Barclay discloses that “the client 860 can take the form of a wagering game machine. Examples of wagering game machines can include floor standing models, handheld mobile units, bar-top models, *workstation-type console models*, surface computing machines[.]” (EX1006, 19:8-16.) For example, “FIG. 10 is a conceptual diagram that illustrates an example of a personal wagering game system 1000, according to some embodiments. In FIG. 10, the personal wagering game system (‘system’) 1000 includes an exemplary computer system 1030 connected to several devices, including user input devices (e.g., a keyboard 1032, a mouse 1031), a web-cam 1035, a monitor 1033, speakers 1034, and a headset 1036 that includes a microphone and a listening device . . . The wagering game accoutrements include one or more of reels 1008, game meters 1012, indicators 1006, a game control device 1010, a physical lever 1014, a magnetic card reader 1004, a video projection device 1024, input/output ports 1018, USB ports 1019, and speakers 1016. The gaming pad 1002 can present feedback of online activities . . . The physical lever 1014 can produce feelings in the lever to emulate a pulling

feel or a vibration. The video projection device 1024 can project video onto the reels 1008 so that the reels 1008 can present many different types of wagering games. The reels 1008 can spin when the physical lever 1014 is pulled. The video projection device 1024 can project reel icons onto the reels 1008 as they spin. The video projection device 1024 can also project reel icons onto the reels 1008 when the reels 1008 are stationary, but the imagery from the video project device 1024 makes the reels 1008 appear to spin . . . The game pad can also have an electronic (e.g., digital) button panel 1025, an electronic control panel 1023, or any other type of changeable panel that can change appearance and/or configuration based on the game being played, the action being performed, and/or other activity presented within an online gaming venue.” (EX1006, 20:39-21:50.)

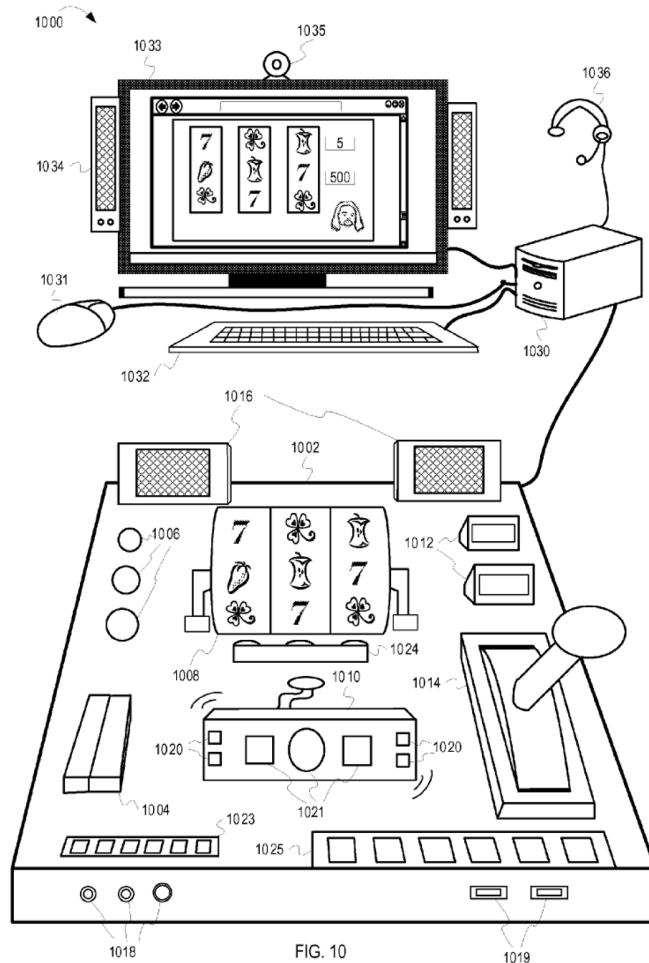


FIG. 10

317. As another example, “FIG. 12 is a conceptual diagram that illustrates an example of a wagering game machine 1200, according to some embodiments. Referring to FIG. 12, the wagering game machine 1200 can be used in gaming establishments, such as casinos. According to some embodiments, the wagering game machine 1200 can be any type of wagering game machine and can have varying structures and methods of operation. For example, the wagering game machine 1200 can be an electromechanical wagering game machine configured to play mechanical slots, or it can be an electronic wagering game machine

configured to play video casino games, such as blackjack, slots, keno, poker, blackjack, roulette, etc.” (EX1006, 23:10-22.) As shown in FIG. 12 below, Barclay 019 discloses a “*player input device 1224* [that] comprises a plurality of push buttons on a button panel 1226 for operating the wagering game machine 1200.” (EX1006, 23:48-50.)

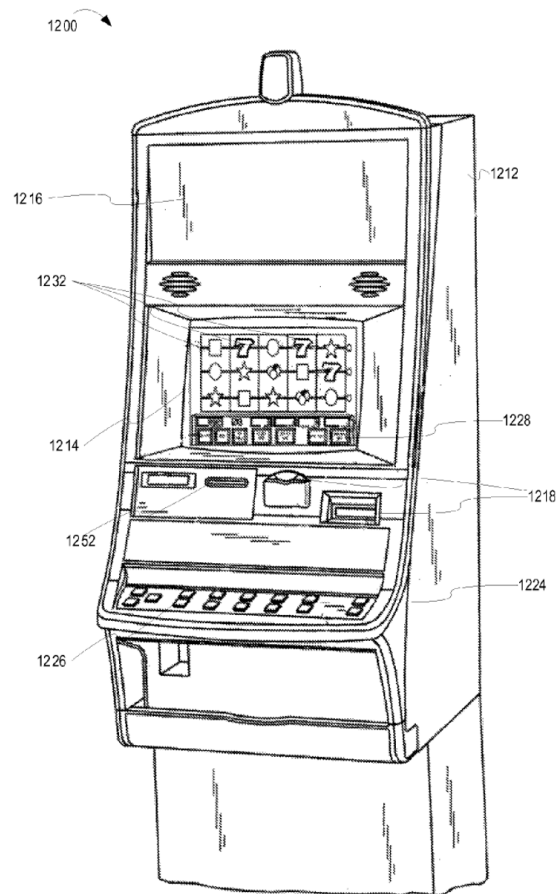


FIG. 12

318. Barclay '019 also discloses a gaming platform that is a social website and a social network messaging application providing the actual games and enabling gameplay. For example, as shown in FIG. 7, Barclay '019 discloses a

“widget 710” that “includes a first control 721 that can launch non-wagering games from which a player can earn points. The gaming widget 710 also presents a control 725 that launches a wagering panel 726, through which a player can select a first number (e.g., bet amount 712) of non-monetary points (via a points betting console 730) as a wager on a prediction of any event[.]” (EX1006, 12:30-36.) As shown in FIG. 7, “[t]he wagering widget 710 can be an application on a webpage 703 of a *social network website (e.g., Facebook.com)* where the presentation of the webpage 703 is associated with a social network session for a social network account via a web browser 701.” (EX1006, 13:4-8.)

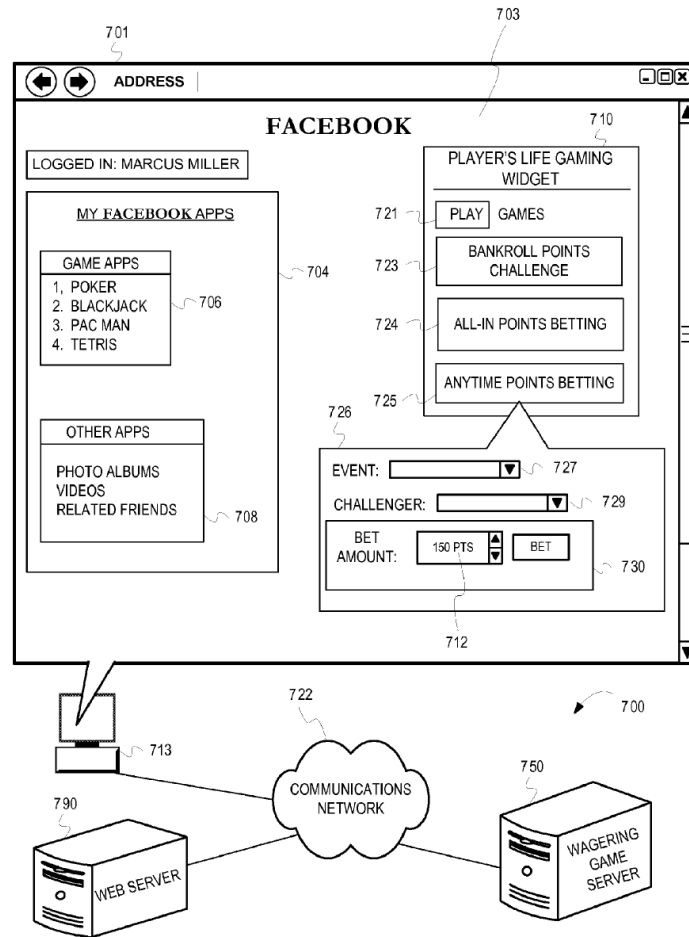


FIG. 7

e. 1[C][1]: “enabling a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network,”

319. Barclay '019 discloses this element.

320. The '054 patent does not require that the recited “second gameplay” to be different from the “first gameplay.” Rather, the dependent claims of the '054 patent broadly state that the “first gameplay” and the “second gameplay” can be

“shared gameplay” or “different games,” and that they can be played by the “same player” or “different players.” (EX1001, Claims 3, 5-8.)

321. All of these are disclosed by Barclay '019.

322. First, Barclay '019 discloses one gameplay being a game (*e.g.*, wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being a different game played by a different player. (EX1006, 1:39-42.) Barclay '019 states that “[*m*]ultiple users can be connected to the networks via computing devices. The multiple users can have accounts that subscribe to specific services, such as account-based wagering systems (*e.g.*, account-based wagering game websites, account-based casino networks, *etc.*).” (EX1006, 5:40-44.) These computing devices include “a computer system, a personal digital assistant (PDA), a cell phone, a laptop, a wagering game machine, or any other device or machine that is capable of processing information, instructions, or other data provided via the communications network 822.” (EX1006, 15:41-45.) This means that Barclay '019's system is not restricted to a single user, but accessible by multiple users using multiple devices. In other words, two different players can play Barclay '019's games using their own devices. In fact, Barclay discloses a workflow where a first user plays on a first wagering game machine and a second user plays on a second wagering game machine. (*Id.*, 11:4-53.)

323. The two gameplays can be of the same game type or different game types, because Barclay '019 provides multiple types of games. Barclay '019 states that “the wagering game unit [] can present wagering games, such as **video poker, video black jack, video slots, video lottery, reel slots**, etc., in whole or part.” (EX1006, 22:25-27; *see also id.* 23:17-22 (“the wagering game machine 1200 can be an electromechanical wagering game machine configured to play mechanical slots, or it can be an electronic wagering game machine configured to play video casino games, such as **blackjack, slots, keno, poker, blackjack, roulette**, etc.”), 19:17-31.)

324. Second, Barclay '019 enables one gameplay being a game (*e.g.*, wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being a shared gameplay played by the same player by logging into a different device or the same device. (EX1006, 1:39-42.) Barclay '019 discloses that the same player can play games across multiple devices. For example, “the in-casino activity can be a **continuation of a persistent-state game** that is played outside the casino[.]” (EX1006, 8:29-31.) “The user can **login to the wagering game machine 360 via a player account 317**, indicated via the player login console 372, and play the wagering game 305 via a wagering game session. The **player account can access the points earned by the player** (*e.g.*, the five points earned at 12:15 PM via the usage of key phrases 132A and 132B) to perform gaming activity for

the wagering game 305.” (*Id.*, 9:33-40.) Further, “some points may be *earned outside a casino, but only become active when a player (or a group of the player's friends) goes into a casino* and uses the point there for game play on a wagering game machine or for group wagering activities (e.g., slot tournament, play at same bank, etc.).” (*Id.*, 8:23-28; *see also id.*, 10:39-12:7.) In other words, Barclay ’019 discloses or at least suggests allowing the same player to play a continued gameplay across multiple devices. A POSITA would also understand that Barclay ’019 discloses or suggests one gameplay being a game (e.g., wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being a gameplay played by the same player by logging into the same or different device.

325. Third, Barclay ’019 enables one gameplay being a game (e.g., wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being the same game by another player. (EX1006, 1:39-42, 13:45-61.) Barclay ’019 expressly discloses “provid[ing] and control[ing] content for community games, including networked games, social games, competitive games, or any other game that *multiple players can participate in at the same time.*” (EX1006, 15:42-46.) Further, Barclay ’019 discloses that “*a player sitting at a wagering game machine bank can offer a certain amount of points to win if another player, at the bank, hits a specific gaming event . . .* If the other player achieves the specific gaming event, then the other player wins the points bankrolled by the first player.

The first player that bankrolled the points could also win points for initiating a points wagering session that utilized the player's bankroll of points. For example, the first player could receive points from the other player (e.g., as a signup fee for the points wagering session and/or if the other player does not attain the event) and/or receive points from a casino for initiating the points wagering session.” (EX1006, 13:45-61.) In other words, the bankrolling player is passively involved in the gameplay by offering points to win and getting fees. Barclay '019 also discloses other multi-user games. (*See id.*, 12:8-13:24.)

326. Barclay '019 enables participation in any of the second gameplays of the video gaming application via the *cloud computing network*. As discussed, Barclay '019's *video gaming application* operates in the *cloud computing network* (e.g., wagering game system architecture 800). (*Supra* §IX.E.2.b.) Thus, it follows that Barclay '019 enables participation in the second gameplay of the video gaming application via the *cloud computing network*. Specifically, the user device providing the second gameplay would communicate with the gaming servers as discussed above with respect to FIG. 8. (*Supra* §§IX.E.2.a-IX.E.2.b.)

f. 1[C][2]: “the second computing device participating in the second gameplay via a second gaming platform;”

327. Barclay '019 discloses this element.

328. As discussed above, Barclay '019 discloses various types of gaming platforms (e.g., a mobile device, a game console, a social website), consistent with

the '054 patent. (*Supra* §IX.E.2.d.) A POSITA would thus understand that any gameplay, including the first and the second gameplay, would be via one of those gaming platforms.

g. 1[D]: “receiving one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;”

329. Barclay '019 combination discloses this element.

330. First, Barclay '019 discloses an *event* from a gameplay (*e.g.*, first or second gameplay). In FIG. 3 (below), a gameplay in a wagering game yielded a gameplay result (*i.e.*, “*event*”). “During the wagering game session (*e.g.*, at 3:45 PM, as indicated via the clock 306) the player [M. Miller] can receive a specific gaming result (*e.g.*, a random result of *three shamrocks in a row* via a combination of symbols on the reels 307).” (EX1006, 9:40-44.) Here, the *gameplay result* is an event from a gameplay (*e.g.*, first gameplay).

331. Further, “[i]n response to the gaming result, an in-game chat application 310 automatically inserts a *message 312* into a message area 311 of the in-game chat application 310. The message 312 describes the gaming activity.” (EX1006, 9:43-44.) Here, the *message 312* also is or represents an event from a gameplay (*e.g.*, first gameplay).

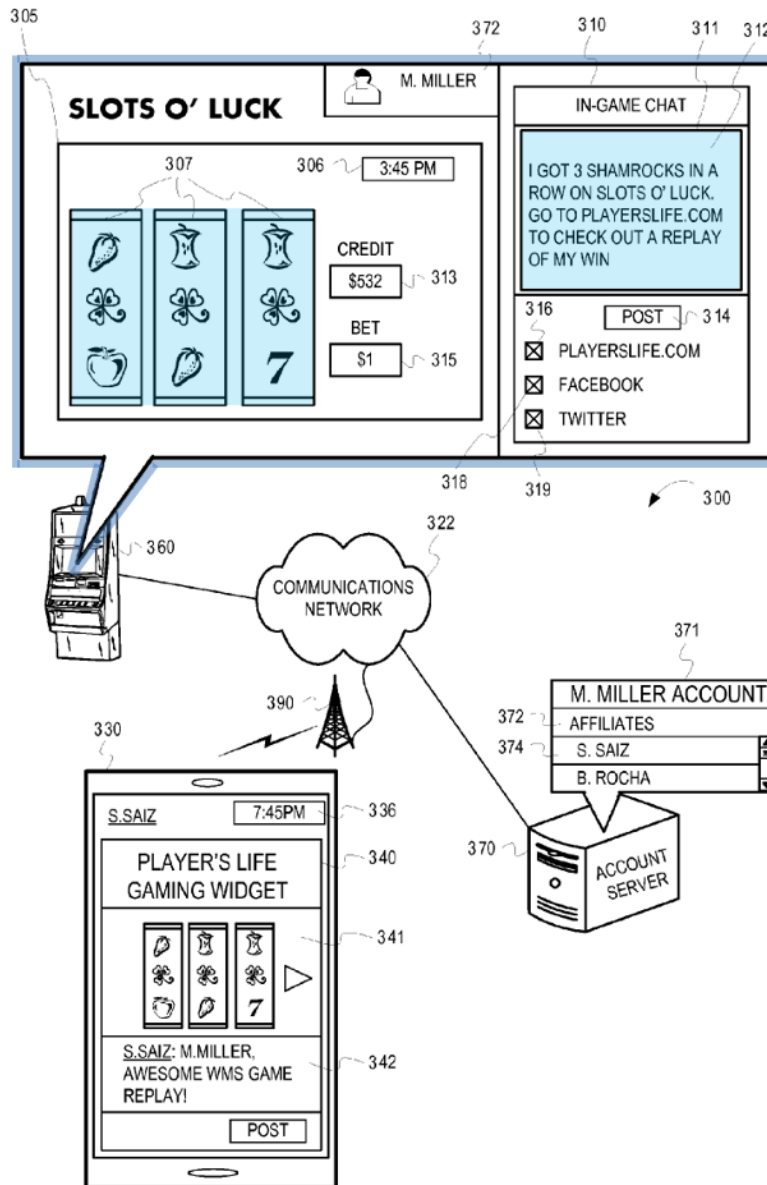


FIG. 3

332. Barclay '019 discloses a *social network service* that the *event* can be posted to. FIG. 3 shows many social network services that the player can post the event to, including *PlayersLife.com*, *Facebook*, and *Twitter*. Barclay '019 describes *PlayersLife.com* as a “social networking website.” (EX1006, 2:67; *see also id.*, 6:26-31.)

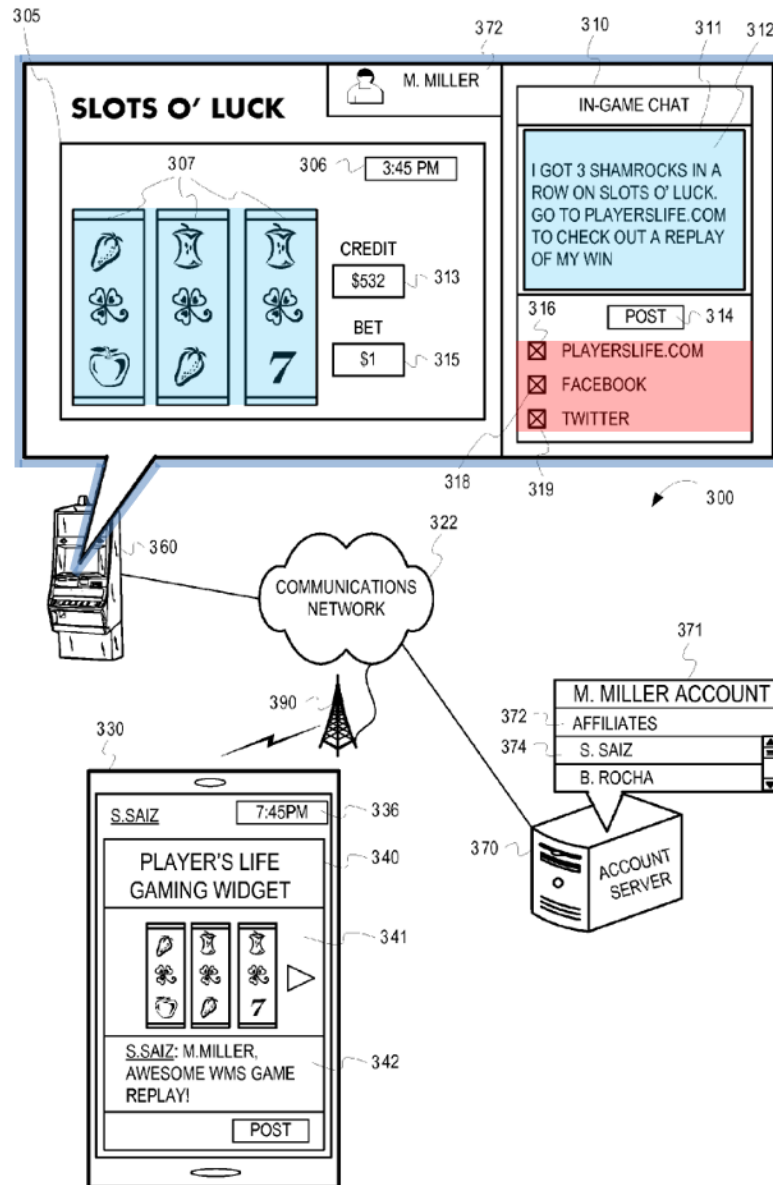


FIG. 3

333. Barclay '019 discloses other examples of *social network service*.

“For example, a user posts a social networking message via a social communication application (e.g., a user updates a profile status via *FaceBook®.com*, a user submits a Tweet via *Twitter.com*, a user posts a blog or

forum entry via *PlayersLife®.com*, a user submits a chat entry, a user sends an email, etc.).” (EX1006, 6:26-31.)

334. FIG. 3 shows that the *gameplay result* (three shamrocks in a row) posted to a “social network website” *Player’s Life*. (EX1006, 10:4, 13:5.)

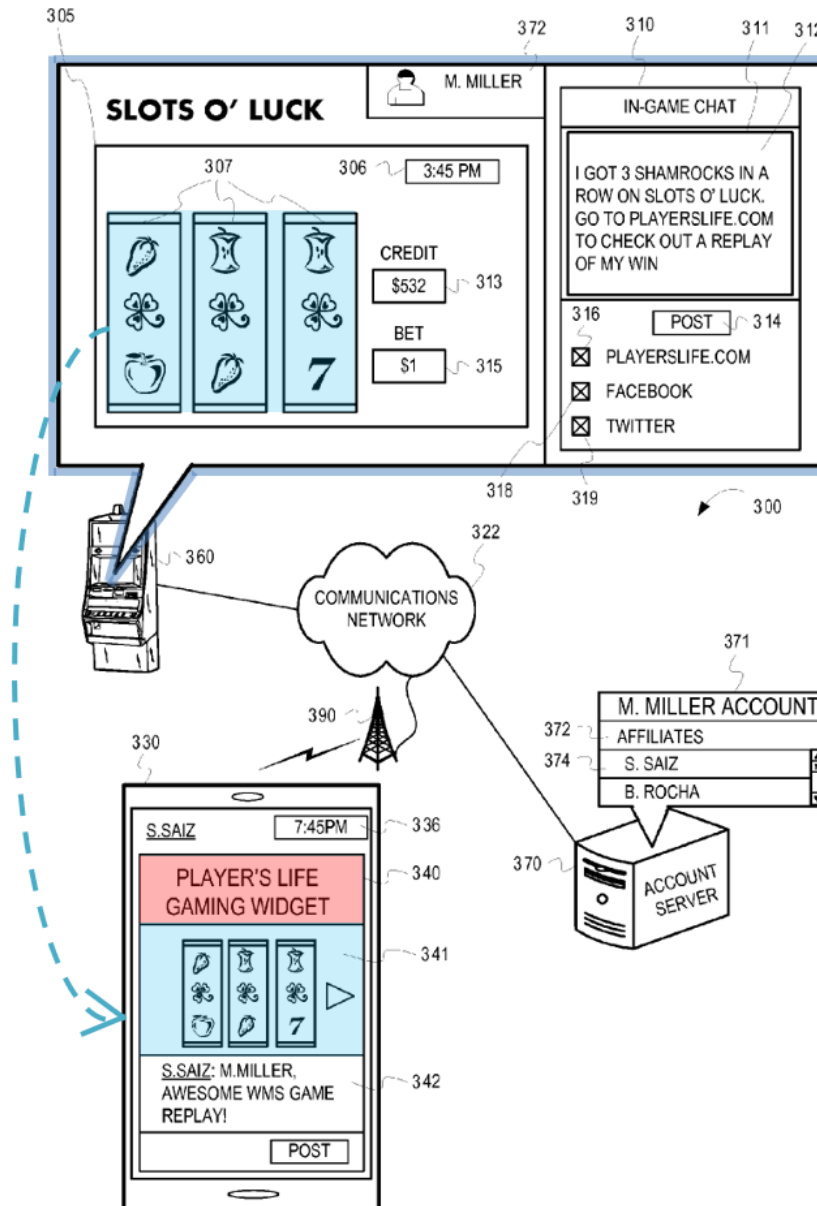


FIG. 3

335. Barclay '019 discloses receiving *interactions* via the *social network service* in association with the *event*. One type of interaction is a *comment* on the *gameplay result*, as shown in FIG. 3. “Referring back to FIG. 3, a social contact of the first user (e.g., a second user, S. Saiz, who is a friend of the first user, Marcus Miller), may view a publication of the message 312 via the mobile device 330 using a gaming widget 340⁴ installed on the mobile device 330. The account server 370 links the first user, Marcus Miller, via the player account 371, to other accounts, or affiliates 372, one of which is the user account 374 for the second user, S. Saiz. The second user views a replay of *the player's achievement* (e.g., S. Saiz views at 7:45 PM, as indicated by the clock 336, the replay 341) and *posts a comment 342* (e.g., via the post control 343).” (EX1006, 10:1-11.)

⁴ The disclosure of Barclay uses the term “gaming widget” to cover “an application on a webpage [] of a social network website (e.g., Facebook.com) where the presentation of the webpage [] is associated with a social network session for a social network account via a web browser [].” (EX1006, 13:4-8.)

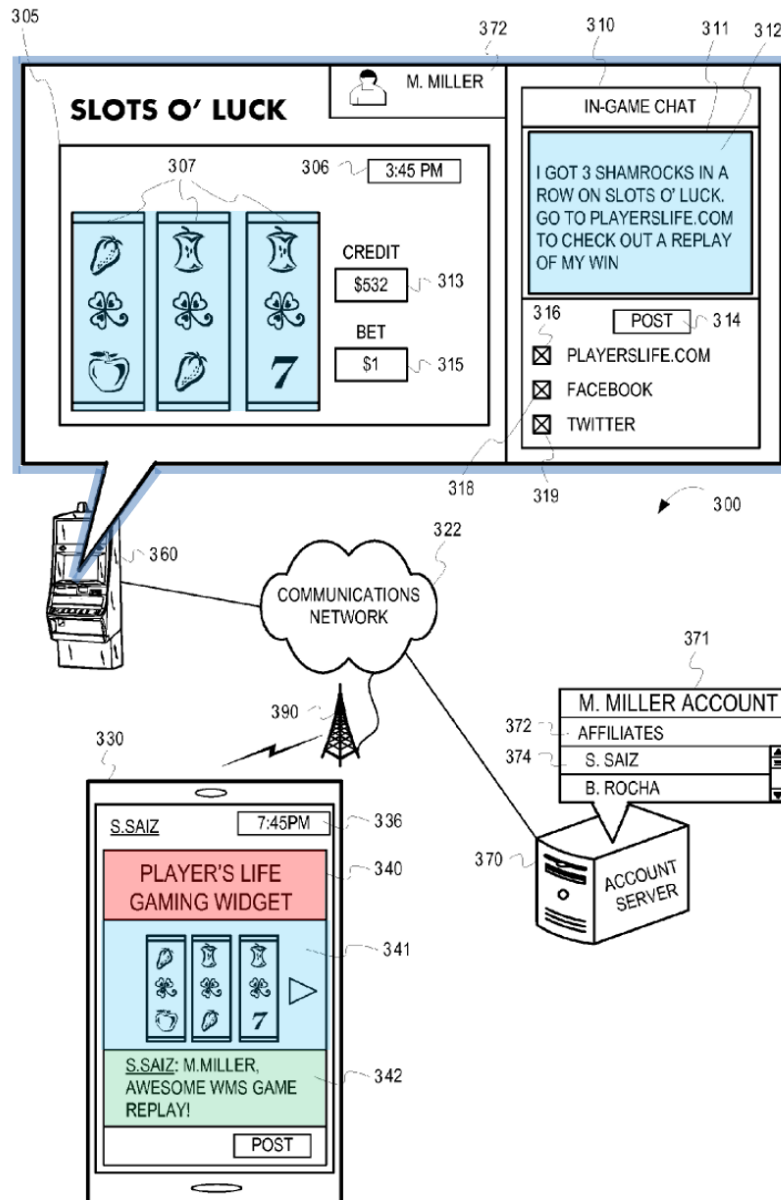


FIG. 3

336. Barclay '019 discloses additional *interactions*. In a second example, a type of interaction is (or is indicative of) a *click*. As discussed above, the player can post a “message 312 describ[ing] the *gaming activity*” to the *social website*. Barclay '019 further states that “if enough users *click on the post of the message 312*, or if the first user can get enough other users to register for an online account

to see the posted message 312, the first user may ‘re-win’ the wagering game win.” (EX1006, 10:30-35.)

337. In a third example, Barclay ’019 discloses that the social post can contain a *link*, which can be *activated* by the second user. “[T]he server 150 can detect that *a link 111 included in the message 107* is activate by users (e.g., affiliated users, total users, a combination, etc.). The link 111 is to an online gaming venue, such as Jackpotparty.com®. The server 150 can track a number of times that other users *activate* the *link 111* and visit the website. The sever 150 can award points that vary in value based on the number of activated links to the online gaming venue (e.g., the server 150 can increase any of the multipliers 144A, 144C, or 144D, or generate other multipliers, based on a number of links that were activated via the message 107 after the message 107 was published).” (EX1006, 5:14-25.) This description corresponds to FIG. 1, where the social post is generated on PlayersLife.com rather than the wagering game. Nevertheless, Barclay ’019 is clear that FIGS. 1-3 can be the same system. (EX1006, 6:19-22 (“[t]his description will refer to FIGS. 1 and 3 in conjunction with FIG. 2. In other words, FIGS. 1 and 3 help illustrate the flow of FIG. 2 according to some embodiments.”); 9:8-12 (“FIG. 3 is an illustration of additional tracking and rewarding of social communications associated with gaming, according to some embodiments. FIG. 3 helps illustrate some examples of embodiments described in

FIG. 2, and also refers back to FIG. 1.”.) Thus, it would have been obvious to a POSITA that a link about the gameplay would be embedded in the social post in FIG. 3, and Barclay ’019 would track the activation (e.g., click) of such a link.

338. In a fourth example, a type of interaction is *viewing* of the *gameplay result*. “The second user *views* a replay of the *player's achievement* (e.g., S. Saiz *views* at 7:45 PM, as indicated by the clock 336, the replay 341) and posts a comment 342 (e.g., via the post control 343).” (EX1006, 10:8-12.) Barclay ’019 states that “the server 150 may also provide an additional reward because the second user *viewed* the gaming replay 341.” (EX1006, 10:24-26.)

h. 1[E]: “determining an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service;”

339. Barclay ’019 discloses determining an *influence* to one of the first gameplay and the second gameplay of the *video gaming application* based on the one or more *interactions* via the *social network service*.

340. In the first example, the interaction is a *comment* on the *gameplay result* by a second user, as shown in FIG. 3. (*Supra* §IX.E.2.g.) Based on the appearance of keywords in the *comment* (“*interaction*”), Barclay ’019’s server determines the *amount of reward points* (“*influence*”). “The second user views a replay of the player’s achievement (e.g., S. Saiz views at 7:45 PM, as indicated by the clock 336, the replay 341) and *posts a comment 342* (e.g., via the post control

343). The comment 342 includes the key phrase 132C (i.e., the phrase ‘WMS game replay’). The server 150, for example, may award the second user (e.g., via user account 374) *the default point value 133C for the usage of the key phrase 132C.*” (EX1006, 10:8-16.) Rewarding the second user would influence and modify any ongoing or future gameplay by the second user (i.e., the second gameplay). (*Supra* §IX.E.2.e.)

341. Barclay ’019 discloses that the default point values can be multiplied by a multiplier under certain conditions by analyzing the comment. To calculate the final reward, “the server 150 specifies a multiplier 144C, because of the affiliate relationship between the first user and the second user, and because the second user commented (e.g., via the gaming widget 340) about content generated via the first user's gaming activity (e.g., the message 312 published during the first user's wagering game session).” (*Id.*, 10:16-23.)

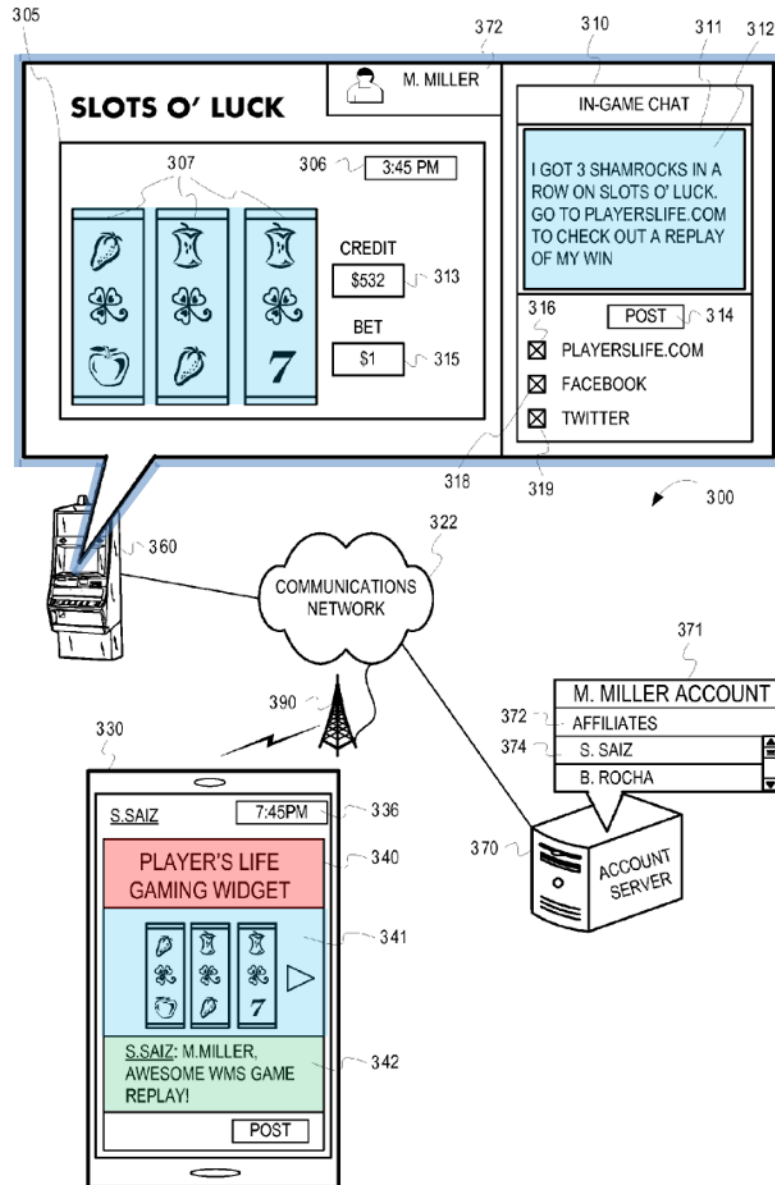


FIG. 3

342. Barclay '019 describes how the server determines the award based on keywords in a message such as *comment 342*. “[T]he system can *parse the message into a plurality of words, compare the plurality of words to a library of promotional words and phrases* stored on a wagering game server, and detect that at least one of the plurality of words is equivalent to, or substantially similar to,

one of the promotional words or phrases. . . .” (EX1006, 6:58-63.) For example, the *list 130* in FIG. 1 shows predefined key phrases and their corresponding rewards. “[T]he *list 130* includes at least four key phrases: key phrase 132A (‘Jackpotparty.com’), key phrase 132B (‘site-wide event’), key phrase 132C (‘WMS game replay’), and key phrase 132D (‘Playerslife.com’).” (*Id.*, 3:37-40.) “Each of the key phrases 132A-132D also include award values, such as default point values 133A, 133B, 133C, and 133D (‘133A-133D’).” (*Id.*, 3:52-55.) Referring to FIG. 1, Barclay ’019 states that “the *server 150* can parse the *message* [] and search for first phrases (e.g., words or combinations of words) that match, or are substantially similar to, second phrases from a group, or library, of key words or phrases, as indicated in a *list 130*.” (*Id.*, 3:32-36; *see also id.*, 3:49-58, 4:21-67, 6:55-7:49.) A POSITA would have understood that *comment 342* in FIG. 3 would be parsed and searched in a similar manner.

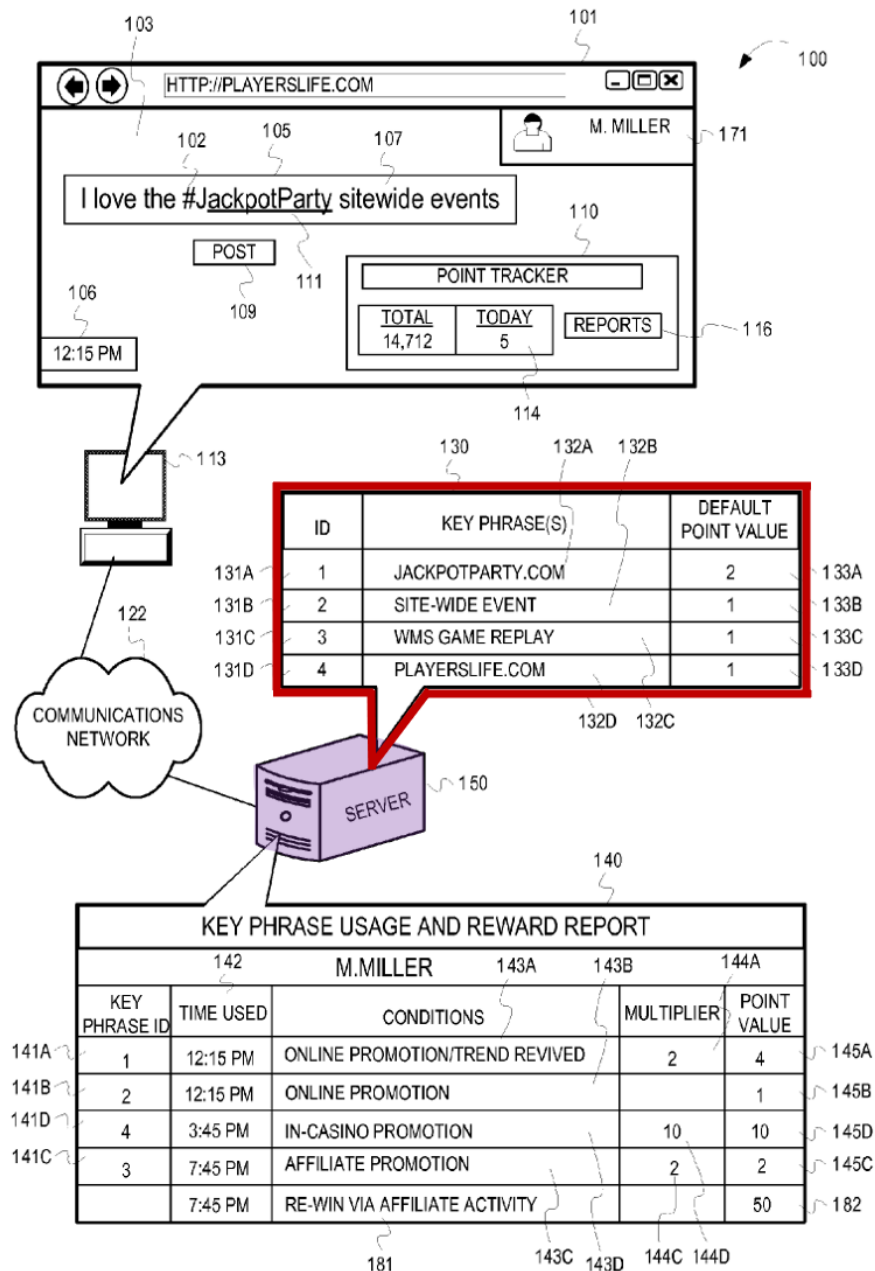


FIG. 1

343. Barclay '019 discloses many conditions associated with a *comment* (“*interaction*”) that can be analyzed by the system to determine *amount of reward points* (“*influence*”). “For example, the condition may be that the promotional expression is substantially similar to a word or phrase stored in a key phrase

library, that the promotional expression fits a specific form, or that the promotional expression is submitted via a specific website. The condition can be associated with the message, the transmission or receipt of the message, the comparison of the message to promotional phrases, the promotional phrases, etc. In some embodiments, the system can detect that a property associated with publication of the message satisfies the condition. For example, the system can detect that the message is published within a specific time period, detect that the one of the plurality of key phrases causes a topic to trend upward for the social networking website/application, detect that the message is republished via an affiliate user account, etc.” (EX1006, 7:34-49; *see also id.*, 8:5-9:7.) “[T]he system provides an award in satisfaction of a condition associated with the promotional expression.” (*Id.*, 7:32-34.)

344. In the second example, the interaction is (or is indicative of) a **click** on the **message 312** by the second user. (*Supra* §IX.E.2.g.) Based on the **click** (“**interaction**”), Barclay ’019 determines the **amount of reward points** (“**influence**”) to users. “In some embodiments, if enough users **click on** the post of **the message 312**, or if the first user can get enough other users to register for an online account to see the posted message 312, the first user may ‘**re-win**’ the **wagering game win**. Further, the users who register to see a post of the message

312 can possibly *‘win’ that win value* that the first user won, or win some other award (e.g., additional points).” (EX1006, 10:30-37.)

345. Rewarding the first user would influence and modify the current “wagering game session” by the first user (*i.e.*, the first gameplay). (EX1006, 9:36.) Further, rewarding the second user would influence and modify any ongoing or future gameplay by the second user (*i.e.*, the second gameplay). (*Supra* §IX.E.2.e.)

346. In the third example, Barclay ’019 discloses that the social post can contain a *link*, which can be *activated* by the second user. Based on the *activation* (“*interaction*”), Barclay ’019 determines the *amount of reward points* (“*influence*”) to users. “[T]he server 150 can detect that *a link 111 included in the message 107* is *activate* by users (e.g., affiliated users, total users, a combination, etc.). The link 111 is to an online gaming venue, such as Jackpotparty.com®. The server 150 can track a number of times that other users *activate* the *link 111* and visit the website. The sever 150 can *award points that vary in value based on the number of activated links to the online gaming venue* (e.g., the server 150 can increase any of the multipliers 144A, 144C, or 144D, or generate other multipliers, based on a number of links that were activated via the message 107 after the message 107 was published).” (EX1006, 5:14-25.) This description corresponds to FIG. 1, but it would have been obvious to a POSITA

that a link would be embedded in the social post in FIG. 3, and Barclay '019 would track the activation (*e.g.*, click) of such a link and provide reward points accordingly. (*Supra* §IX.E.2.g.) As discussed above, rewarding the first user would influence and modify the current “wagering game session” by the first user (*i.e.*, the first gameplay). (EX1006, 9:36.) And rewarding the second user would influence and modify any ongoing or future gameplay by the second user (*i.e.*, the second gameplay). (*Supra* §IX.E.2.e.)

347. In the fourth example, the interaction is **viewing** of the **gameplay result** by the second user. (*Supra* §IX.E.2.g.) Based on the **viewing** (“**interaction**”), Barclay '019 determines the **amount of reward points** (“**influence**”). “[T]he server 150 may also provide an **additional reward** because the second user **viewed** the gaming replay 341. For instance the first user receives a **bonus reward** in the wagering game 305 and/or receives an **award of points** (*e.g.*, wins a total award value 182 in the report 140 in FIG. 1, because the condition 181 indicated that a sufficient number of affiliates, such as S. Saiz, **viewed** the **game replay 341**).” (EX1006, 10:24-30.) As discussed above, rewarding the first user would influence and modify the current “wagering game session” by the first user (*i.e.*, the first gameplay). (EX1006, 9:36.)

348. Barclay '019 contemplates that “the awards can be **in-session** encouragement, benefits, content, displays, etc. . . In some embodiments, the

awards are persistent objects, such as virtual assets (e.g., trophies, accomplishments, etc.) or a number of points (e.g., loyalty or achievement points) associated with a wagering game venue.” (*Id.*, 7:54-61.) Thus, it would have been obvious that any of the examples above can involve providing *in-session* rewards, thus modifying the current gameplay session (e.g., first or second gameplay). This is consistent with the “in-game reward” described in the ’054 patent. (EX1001, FIG. 4, 26:50-67.)

i. 1[F]: “and modifying one of the first gameplay and the second gameplay of the video gaming application based on the influence.”

349. Barclay ’019 discloses *modifying* one of the first gameplay and the second gameplay of the *video gaming application* based on the *influence*.

350. In the first example, based on the appearance of keywords in the *comment* (“*interaction*”), Barclay ’019 determines the *amount of reward points* (“*influence*”) and *rewards* the second user accordingly (“*modifying . . . gameplay*”). Rewarding the second user would modify any ongoing or future gameplay by the second user (*i.e.*, the second gameplay). (*Supra* §IX.E.2.e.)

351. “The *comment 342* includes the key phrase 132C (*i.e.*, the phrase ‘WMS game replay’). The server 150, for example, may *award* the second user (e.g., via user account 374) *the default point value 133C for the usage of the key phrase 132C*.” (EX1006, 10:11-15.) Barclay ’019 discloses that the default point

values can be multiplied by a multiplier under certain conditions by analyzing the comment. To calculate the final reward, “the server 150 specifies a multiplier 144C, because of the affiliate relationship between the first user and the second user, and because the second user commented (e.g., via the gaming widget 340) about content generated via the first user's gaming activity (e.g., the message 312 published during the first user's wagering game session).” (*Id.*, 10:16-23.)

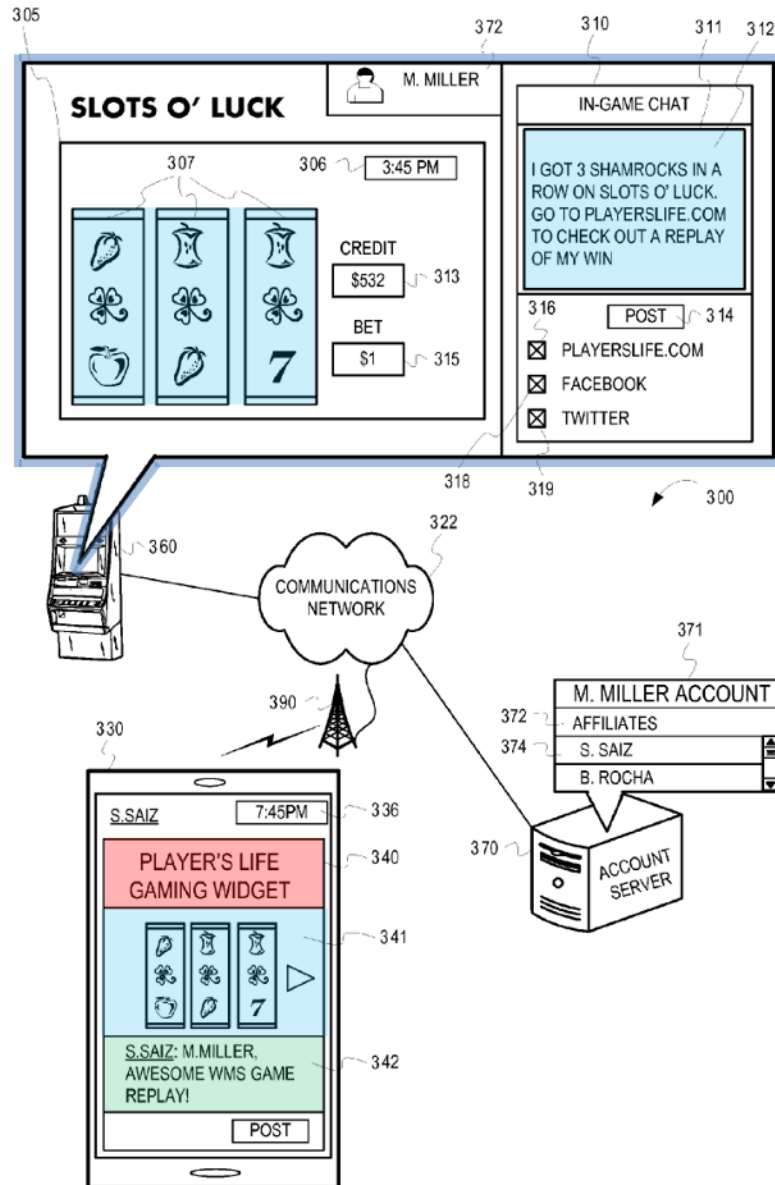


FIG. 3

352. As discussed above, Barclay '019 discloses many conditions that can be analyzed by the system to determine an award given a *comment* (“*interaction*”), and *modifies* the video gaming environment accordingly. (*Supra* §§IX.E.2.g-IX.E.2.h.) “The system *provides an award* in satisfaction of a condition associated with the promotional expression.” (EX1006, 7:32-34.) “The system can *provide*

the award to incentivize and/or *reward* the use of promotion expressions/key phrases to a degree and/or value associated with the condition. For instance, the system can incentivize users with awards to keep up a communication trend. In some embodiments, *the awards can be in-session encouragement, benefits, content, displays*, etc. For instance, the system can *indicate a user's promotional efforts via a meter or a leaderboard*. In some embodiments, *the awards are persistent objects, such as virtual assets (e.g., trophies, accomplishments, etc.) or a number of points (e.g., loyalty or achievement points)* associated with a wagering game venue. The system can transfer and store the awards via a player account associated with the wagering game venue. The player account may be linked to a social networking account associated with a social networking website or social communication application.” (*Id.*, 7:50-65; *see also id.*, 3:59-4:67.)

These points have a variety of use cases in the video gaming environment.

(EX1006, 13:62-14:26.)

353. In the second example, based on the *click* (“*interaction*”), Barclay ’019’s *server* determines the *amount of reward points* (“*influence*”) to users and *rewards* users accordingly (“*modifying . . . gameplay*”). “In some embodiments, if enough users *click on* the post of *the message 312*, or if the first user can get enough other users to register for an online account to see the posted message 312, the first user may ‘*re-win*’ *the wagering game win*. Further, the users who register

to see a post of the message 312 can possibly *‘win’ that win value* that the first user won, or *win* some *other award (e.g., additional points)*.” (EX1006, 10:30-38.) Rewarding the first user would influence and modify the current “wagering game session” by the first user (*i.e.*, the first gameplay). (EX1006, 9:36.) And rewarding the second user would influence and modify any ongoing or future gameplay by the second user (*i.e.*, the second gameplay). (*Supra* §IX.E.2.e.)

354. In the third example, based on the *activation* (“*interaction*”), Barclay ’019’s *server* determines the *amount of reward points* (“*influence*”) to users and *rewards* users accordingly (“*modifying . . . gameplay*”). “[T]he *server* 150 can detect that *a link 111 included in the message 107* is *activate* by users (e.g., affiliated users, total users, a combination, etc.). The link 111 is to an online gaming venue, such as Jackpotparty.com®. The server 150 can track a number of times that other users *activate* the *link 111* and visit the website. The *server 150* can *award points that vary in value based on the number of activated links to the online gaming venue* (e.g., the server 150 can increase any of the multipliers 144A, 144C, or 144D, or generate other multipliers, based on a number of links that were activated via the message 107 after the message 107 was published).” (EX1006, 5:15-25.) As discussed above, it would have been obvious to a POSITA that a link would be embedded in the social post in FIG. 3, and Barclay ’019 would track the activation (e.g., click) of such a link and provide reward points

accordingly. (*Supra* §IX.E.2.g.) Rewarding the first user would influence and modify the current “wagering game session” by the first user (*i.e.*, the first gameplay). (EX1006, 9:36.) And rewarding the second user would influence and modify any ongoing or future gameplay by the second user (*i.e.*, the second gameplay). (*Supra* §IX.E.2.e.)

355. In the fourth example, based on the **viewing** (“**interaction**”), Barclay ’019 determines the **amount of reward points** (“**influence**”) and **rewards** users accordingly (“**modifying . . . gameplay**”). “[T]he server 150 may also **provide** an **additional reward** because the second user **viewed** the gaming replay 341. For instance the first user **receives** a **bonus reward** in the wagering game 305 and/or receives an **award of points** (e.g., wins a total award value 182 in the report 140 in FIG. 1, because the condition 181 indicated that a sufficient number of affiliates, such as S. Saiz, **viewed** the **game replay 341**).” (EX1006, 10:24-30.) Rewarding the first user would influence and modify the current “wagering game session” by the first user (*i.e.*, the first gameplay). (EX1006, 9:36.) And rewarding the second user would influence and modify any ongoing or future gameplay by the second user (*i.e.*, the second gameplay). (*Supra* §IX.E.2.e.)

3. Claim 2: “The computer-implemented method of claim 1, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

356. Barclay '019 discloses that a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website. (*Supra* §IX.E.2.d.)

4. Claim 3

a. 3[A]: **“The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and”**

357. Barclay '019 discloses this element.

358. As discussed, Barclay '019 enables one gameplay being a game (*e.g.*, wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being a shared gameplay played by the same player by logging into a different device (*i.e.*, “second computing device”). (EX1006, 1:39-42; *supra* §IX.E.2.e.)

359. Further, Barclay '019 enables one gameplay being a game (*e.g.*, wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being the same game by another player. (EX1006, 1:39-42, 13:45-61.) Barclay '019 expressly discloses “provid[ing] and control[ing] content for community games, including networked games, social games, competitive games, or any other game that ***multiple players can participate in at the same time.***” (EX1006, 15:42-46.) Further, Barclay '019 discloses that ***“a player sitting at a wagering game machine bank can offer a certain amount of points to win if another player, at the bank, hits a specific gaming event . . .*** If the other player achieves the specific

gaming event, then the other player wins the points bankrolled by the first player. The first player that bankrolled the points could also win points for initiating a points wagering session that utilized the player's bankroll of points. For example, the first player could receive points from the other player (e.g., as a signup fee for the points wagering session and/or if the other player does not attain the event) and/or receive points from a casino for initiating the points wagering session.” (EX1006, 13:45-61.) In other words, the bankrolling player is passively involved in the gameplay by offering points to win and getting fees on his device (*i.e.*, “second computing device”).

b. 3[B]: “wherein the first computing device is a personal computer and the second computing device is a mobile device.”

360. Barclay '019 discloses this element.

361. As discussed above, Barclay '019 discloses that the wagering game session can be accessed via different devices such as “a computer system, a personal digital assistant (PDA), a cell phone, a laptop” (EX1006, 15:38-45; *see also id.* 19:8-16.) Thus, it would have been obvious that Barclay '019 discloses or suggests a configuration in which the first player would use a personal computer (e.g., “a laptop”) as a first computing device to participate in the gameplay and the second player would participate in the gameplay through a mobile device (e.g., “a cell phone”). (EX1006, 15:38-45; *see also id.* 19:8-16.)

5. Claim 4: “The computer-implemented method of claim 3, wherein the first player and the second player have different levels of capability in the shared gameplay.”

362. Barclay '019 discloses this claim.

363. In the bankrolling example, “*a [bankrolling] player creates an event, puts up points to win or lose and/or brokers the points on the event.* The bankrolling player can earn additional points for bankrolling the points. In some embodiments, bankrolling can be performed within a casino, via a wagering game machine. *For example, a player sitting at a wagering game machine bank can offer a certain amount of points to win* if another player, at the bank, hits a specific gaming event (e.g., four of a kind, a specific reel-stop combination, etc.). If the other player achieves the specific gaming event, then the other player wins the points bankrolled by the first player. The first player that bankrolled the points could also win points for initiating a points wagering session that utilized the player's bankroll of points. For example, the first player could receive points from the other player (e.g., as a signup fee for the points wagering session and/or if the other player does not attain the event) and/or receive points from a casino for initiating the points wagering session.” (EX1006, 13:44-61.) It is clear that the two players have different levels of capability. The bankrolling player does not actively play the game and is rewarded differently.

6. Claim 5: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared game played by a same player via different platforms.”

364. Barclay '019 discloses this claim.

365. Barclay '019 discloses the first gameplay and second gameplay being a shared game played by a same player. For example, “the in-casino activity can be a *continuation of a persistent-state game* that is played outside the casino[.]” (EX1006, 8:29-31.) “The user can *login to the wagering game machine 360 via a player account 317*, indicated via the player login console 372, and play the wagering game 305 via a wagering game session. The *player account can access the points earned by the player* (e.g., the five points earned at 12:15 PM via the usage of key phrases 132A and 132B) to perform gaming activity for the wagering game 305.” (*Id.*, 9:33-40.) Further, “some points may be *earned outside a casino, but only become active when a player (or a group of the player's friends) goes into a casino* and uses the point there for game play on a wagering game machine or for group wagering activities (e.g., slot tournament, play at same bank, etc.).” (*Id.*, 8:23-28; *see also id.*, 10:39-12:7.) In other words, Barclay '019 discloses or at least suggests allowing the same player to play a continued gameplay across multiple devices. (*Supra* §IX.E.2.e.)

366. As discussed above, Barclay '019 discloses different gaming platforms. (*Supra* §§IX.E.2.d, IX.E.2.f.) Thus, it would have been obvious that a

player can access the game using any of the platforms (*e.g.*, a mobile device providing gameplay, a game console, a social network messaging application providing gameplay, and a social website providing gameplay) at different times.

7. Claim 6: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a same gaming platform.”

367. Barclay '019 discloses this claim.

368. As discussed above, Barclay '019 discloses one gameplay being a game (*e.g.*, wagering game in FIG. 3) played by “[a]ny individual” and another gameplay being a different game played by a different player. (EX1006, 1:39-42.)

Barclay '019 states that “[*m*]*ultiple users* can be connected to the networks via computing devices” and that these computing devices include “a computer system, a personal digital assistant (PDA), a cell phone, a laptop, a wagering game machine, or any other device or machine that is capable of processing information, instructions, or other data provided via the communications network 822.”

(EX1006, 5:40-41, 15:41-45) This means that Barclay '019's system is not restricted to a single user, but accessible by multiple users using multiple devices. In other words, two different players can play Barclay '019's games using their own devices.

369. The two gameplays can be of the same game type or different game types, because Barclay '019 provides multiple types of games. Barclay '019 states

that “the wagering game unit [] can present wagering games, such as *video poker, video black jack, video slots, video lottery, reel slots*, etc., in whole or part.”

(EX1006, 22:25-27; *see also id.* 23:17-22 (“the wagering game machine 1200 can be an electromechanical wagering game machine configured to play mechanical slots, or it can be an electronic wagering game machine configured to play video casino games, such as *blackjack, slots, keno, poker, blackjack, roulette*, etc.”), 19:17-31.)

370. Barclay '019 discloses games played by different players via the same gaming platform. As discussed above, Barclay '019 discloses different gaming platforms. (*Supra* §§IX.E.2.d, IX.E.2.f.) Thus, it would have been obvious that multiple players can access the games using the same platform (*e.g.*, a mobile device providing gameplay, a game console, a social network messaging application providing gameplay, a social website providing gameplay).

8. Claim 7: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a different gaming platform.”

371. As discussed above, Barclay '019 discloses the first gameplay and the second gameplay are different games played by different players. (*Supra* §§IX.E.2.e, IX.E.7.)

372. Barclay '019 discloses games played by different players via different gaming platforms. As discussed above, Barclay '019 discloses different gaming

platforms. (*Supra* §§IX.E.2.d, IX.E.2.f.) Thus, it would have been obvious that multiple players can access the games using the different platforms (*e.g.*, a mobile device providing gameplay, a game console, a social network messaging application providing gameplay, and a social website providing gameplay). For example, it would have been obvious that in one instance, one player would access a game using a game console, while another player would access a different game using the mobile device.

9. Claim 8: “The computer-implemented method of claim 1, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

373. Barclay ’019 discloses that the game content in the first gameplay and second gameplay is platform agnostic. The ’054 patent discloses that “[a] central unit 4210 may facilitate *continuous game play* that is *shared across all platforms*, thereby making the *game content agnostic*.” (EX1001, 27:46-49.)

374. As discussed above, Barclay ’019 discloses the first gameplay and second gameplay being a shared game played by a same player via different devices (and thus different platforms). (*Supra* §IX.E.6.) In other words, Barclay ’019 discloses gameplays that are platform agnostic as Barclay ’019 supports continuous game play that is shared across all platforms, such as on the game console, on the social website, and on the mobile device.

10. Claim 9: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social

network service that enables users of the video gaming application to send text-based posts.”

375. Barclay '019 discloses this claim. First, Barclay '019 discloses a *video gaming application* linked with a *social network service*. As discussed above, Barclay '019 discloses a social network service including *PlayersLife.com*, *Facebook*, and *Twitter*. (*Supra* §IX.E.2.g.) Further, “the system can *link*, or otherwise associate, a *social networking* account that belongs to the user with a wagering game player account that belong[s] to the user (e.g., the system can provide a tool where a user, such as Marcus Miller, can manually link his *Facebook®.com* account to his PlayersLife.com® account).” (EX1006, 6:34-41, *see also, id.*, 7:63-65 (“[t]he player account may be *linked* to a social networking account associated with a *social networking website* or *social communication application*”).)

376. Further, Barclay '019 discloses the linked *social network service* enables users of the video gaming application to send *text-based posts*. “A player can activate the post control 314 (e.g., via button press, via touch-screen, etc.) which publishes *the message 312* to one or more *social networking venues* (e.g., to *Playerslife.com*, to *Facebook.com*, to *Twitter.com*, etc.) as indicated by selection controls 316, 318, and 319 (selection controls 315, 318, and 319 can instead be included in a user's profile settings).” (EX1006, 9:48-54; *see also id.*, 3:1-24.) The message 312 is a text-based post.

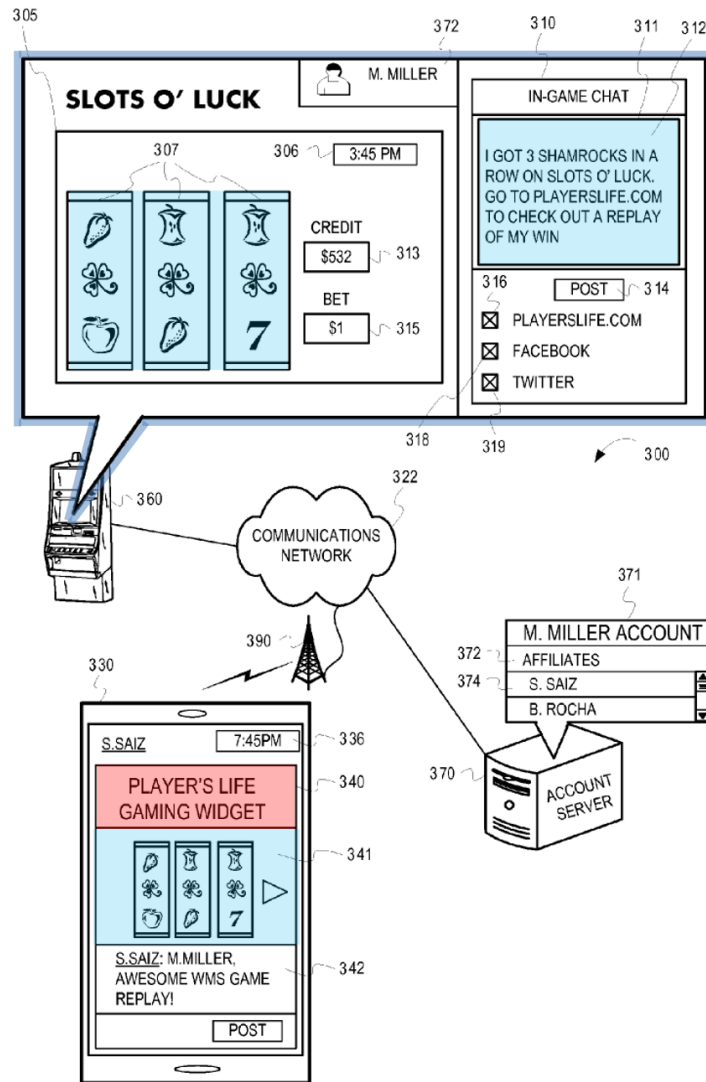


FIG. 3

11. Claim 10: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social network service to enable text-based posts to be broadcasted for the event from one of the first gameplay and the second gameplay.”

377. Barclay '019 discloses this claim. As discussed above, Barclay '019 discloses the video game application is linked with the social network service to enable text-based posts. (*Supra* §IX.E.10.)

378. Barclay '019 further enables text-based posts to be broadcasted for an event from one first gameplay and the second gameplay. “A player can activate the post control 314 (e.g., via button press, via touch-screen, etc.) which *publishes* the *message 312* to one or more *social networking venues* (e.g., to *Playerslife.com*, to *Facebook.com*, to *Twitter.com*, etc.) as indicated by selection controls 316, 318, and 319 (selection controls 315, 318, and 319 can instead be included in a user's profile settings).” (EX1006, 9:48-54; *see also id.*, 3:1-24.) Barclay '019 discloses that the text-based posts are “broadcasted.” “[T]he *social network server 880* can provide one or more social networking communication mechanisms that *publish (e.g., post, broadcast, etc.) a message to a mass* (e.g., to multiple people, users, social contacts, accounts, etc.). The social networking communication mechanism can publish the message to the mass simultaneously. Examples of the published message may include, but not be limited to, a blog post, a mass message post, a news feed post, a profile status update, a mass chat feed, a mass text message broadcast, a video blog, a forum post, etc. *Multiple users and/or accounts can access the published message and/or receive automated notifications of the published message.*” (EX1006, 18:17-33; *see also id.*, 2:64-3:14, 6:33-44.)

379. The text-based post (e.g., message 312) broadcasted to “one or more *social networking venues* (e.g., to *Playerslife.com*, to *Facebook.com*, to

Twitter.com, etc.)” is for an *event* from one of the gameplays (e.g., first or second gameplay) as it relates to the *gameplay results* of the games. (EX1006, 9:48-54; *see also id.*, 3:1-24.)

12. Claim 11: “The computer-implemented method of claim 1, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

380. Barclay ’019 discloses this claim. As discussed above, Barclay ’019 discloses the *video game application* is linked with the *social network application*. (*Supra* §IX.E.10.)

381. As discussed above, Barclay ’019 discloses modifying one of the gameplays (e.g., first or second gameplay) of the *video gaming application* based on the influence determined based on one or more *interactions* via the *social network service*. (*Supra* §§IX.E.2.g-IX.E.2.i.) These *interactions* (e.g., comments, clicks, views on a social website) are social network activities. (*Id.*)

13. Claim 12: “The computer-implemented method of claim 11, wherein the social network application is included in the video gaming application.”

382. Barclay ’019 discloses this claim.

383. With reference to FIG. 8, “[t]he wagering game system architecture 800 can [] include a *wagering game server 850*” and “also include a *social network server 880* configured to host social networking network accounts, provide social networking content, control social networking communications,

store associated social contacts, etc.” (EX1006, 15:3-4, 18:17-21.) Further, “some functions performed by one component could be performed by other components. For example, the wagering game server 850 can also be configured to perform functions of the secondary content server 840, the *social network server 880*, the web server 890, and other network elements and/or system devices.” (*Id.*, 18:60-65; *see also id.*, 18:34-47.) In other words, the same Barclay ’019 server can host both the *video gaming application* and the *social network service*. In this implementation, the same entity owns and maintains both the games and the social network service, and it would have been obvious that the developer would deploy the social network application as part of the video gaming application.

384. Additionally or alternatively, “[t]he wagering game system architecture 800 can also include a web server 890 configured to control and present an online website that hosts wagering games. The web server 890 can also be configured to present multiple wagering game applications on the client 860 via a wagering game website, or other gaming-type venue accessible via the Internet.

The web server 890 can host an online wagering website and/or a social networking website. The web server 890 can include other devices, servers, mechanisms, etc., that provide functionality (e.g., controls, web pages, applications, etc.) that web users can use to connect to a social networking

application and/or website and utilize social networking and website features (e.g., communications mechanisms, applications, etc.).” (EX1006, 18:34-47.)

385. Similarly here, the same entity owns and maintains both the games and the social network service, and it would have been obvious that the developer would deploy the social network application as part of the video gaming application.

14. Claim 13: “The computer-implemented method of claim 11, wherein the social network application is a stand-alone third-party application coupled to the video gaming application.”

386. Barclay ’019 discloses this claim. For example, it discloses stand-alone third-party *social network applications* such as *PlayersLife.com*, *Facebook* and *Twitter*. (*Supra* §IX.E.10.) As shown in FIG. 3, the social network application *PlayersLife.com* is a stand-alone application from the wagering game application. (EX1006, FIG. 3.) It would have been obvious to a POSITA that *Facebook* and *Twitter* are similarly stand-alone applications, and that they are third-party applications implemented separately from the video gaming applications by the game developer of Barclay ’019 (assigned to WMS Gaming, Inc.).

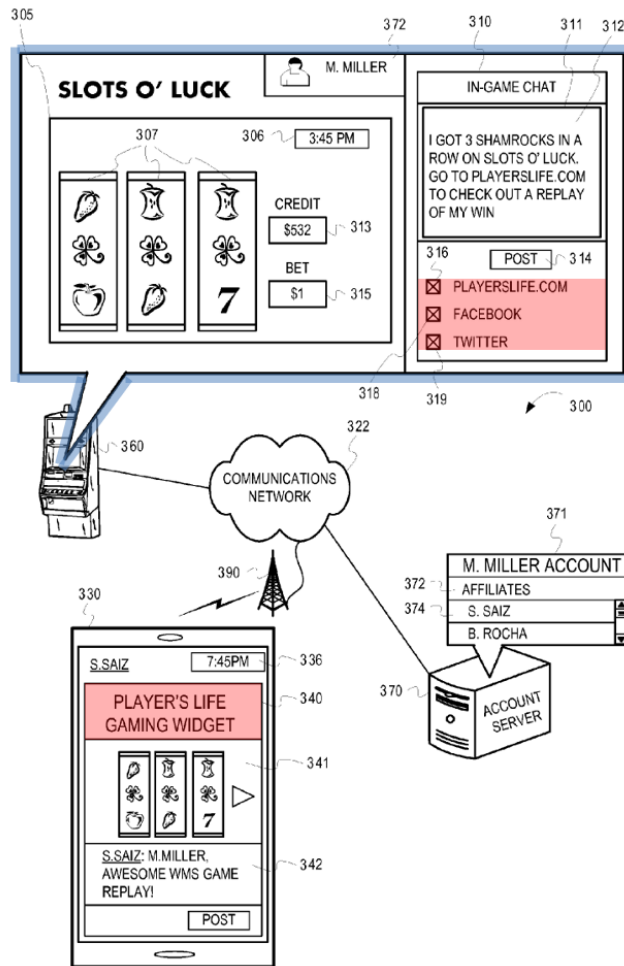


FIG. 3

387. Further, FIG. 8 shows that its wagering game server (hosting the *video gaming application*) is a separate server from its social network server (hosting the *social network application*), suggesting that the two applications would be separate in this implementation. (EX1006, 18:57-59.)

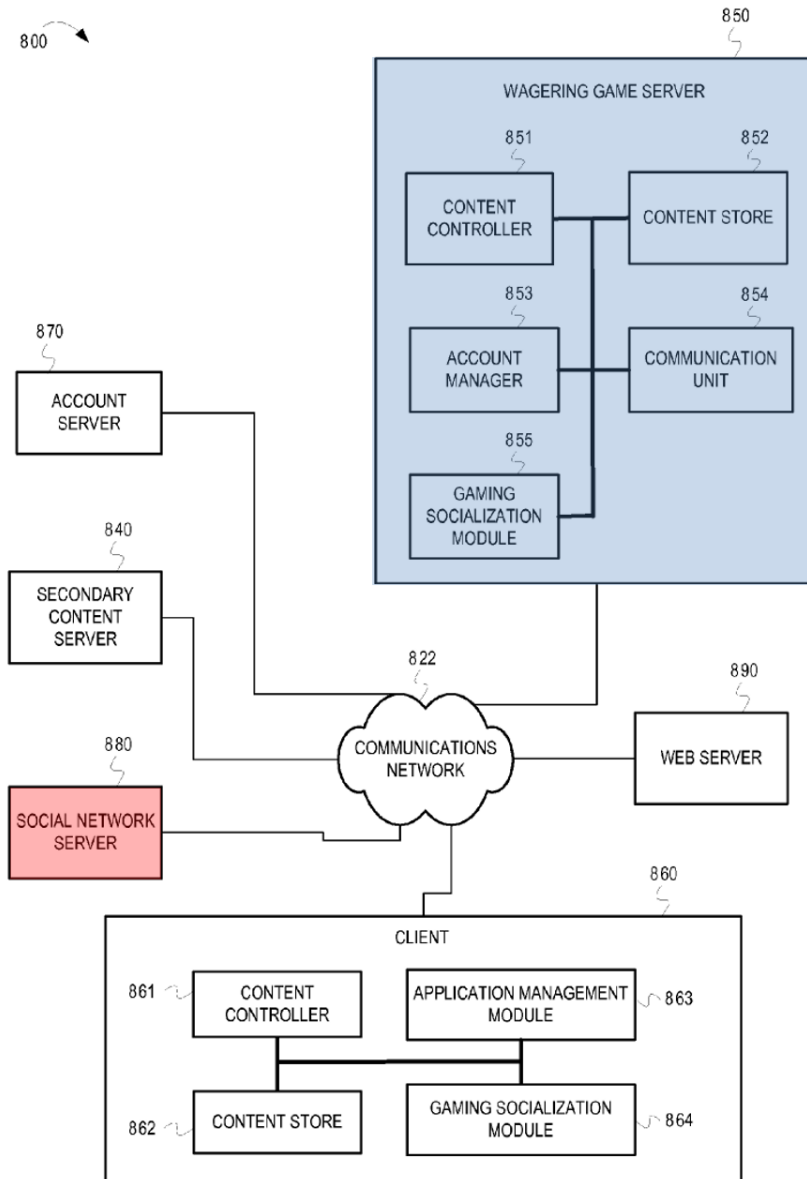


FIG. 8

388. As discussed above, Barclay '019 discloses *social network applications* that are linked with the *video gaming application*, and thus discloses that the *social network applications* are coupled to the *video gaming application*. (*Supra* §IX.E.10.)

15. Claim 14:

a. 14[PR]: “A system for hosting and providing a video gaming environment to one or more users, comprising:”

389. To the extent limiting, Barclay '019 discloses or renders obvious this preamble. For example, Barclay '019 discloses a system for hosting and providing a video gaming environment to one or more users. Barclay '019 discloses “a wagering game system (‘system’)” that performs its operations. (EX1006, 2:60, 6:23-29, 9:12; *see also id.*, Abstract, FIG. 8, claim 11.) As discussed above, Barclay '019 discloses hosting and providing a video gaming environment to one or more users. (*Supra* §§IX.E.2.a, IX.E.2.b.)

b. 14[A]: “one or more processors;”

390. Barclay '019 discloses this element. For example, Barclay '019 states that its system comprises “one or more processors.” (EX1006, claim 11; *see also id.*, 19:50-60, 19:61-20:2, FIG. 9.)

c. 14[B]: “and a memory storing instructions that, when executed by the one or more processors, cause the system to:”

391. Barclay '019 discloses or renders obvious this element. (*Supra* §§IX.E.2.a, IX.E.2.b.) For example, Barclay '019 states that its system comprises “one or more memory storage devices configured to store instructions, which when executed by at least one of the one or more processors, cause the system to perform operations.” (EX1006, claims 17-20, 22; *see also id.*, 19:50-20:35.)

d. 14[C][1]: “provide access to a video gaming application operated in a cloud computing network to a plurality of computing devices;”

392. Barclay '019 discloses this element for reasons stated above with respect to 1[A]. (*Supra* §IX.E.2.b.)

e. 14[C][2]: “enable a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network, the first computing device participating in the first gameplay via a first gaming platform;”

393. Barclay '019 discloses this element for reasons stated above with respect to 1[B][1] and 1[B][2]. (*Supra* §§IX.E.2.c, IX.E.2.d.)

f. 14[C][3]: “enable a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network, the second computing device participating in the second gameplay via a second gaming platform;”

394. Barclay '019 discloses this element for reasons stated above with respect to 1[C][1] and 1[C][2]. (*Supra* §§IX.E.2.e, IX.E.2.f.)

g. 14[C][4]: “receive one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;”

395. Barclay '019 discloses this element for reasons stated above with respect to 1[D]. (*Supra* §IX.E.2.g.)

h. 14[C][5]: “determine an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service; and”

396. Barclay '019 discloses this element for reasons stated above with respect to 1[E]. (*Supra* §IX.E.2.h.)

i. 14[C][6]: “modify one of the first gameplay and the second gameplay of the video gaming application based on the influence.”

397. Barclay '019 discloses this element for reasons stated above with respect to 1[F]. (*Supra* §IX.E.2.i.)

16. Claim 15: “The system of claim 14, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

398. Barclay '019 discloses this claim for reasons stated above with respect to claim 2. (*Supra* §IX.E.3.)

17. Claim 16: “The system of claim 14, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and wherein the first computing device is a personal computer and the second computing device is a mobile device.”

399. Barclay '019 discloses this claim for reasons stated above with respect to claim 3. (*Supra* §IX.E.4.)

18. Claim 17: “The system of claim 16, wherein the first player and the second player have different levels of capability in the shared gameplay.”

400. Barclay '019 discloses this claim for reasons stated above with respect to claim 4. (*Supra* §IX.E.5.)

19. Claim 18: “The system of claim 14, wherein the first gameplay and the second gameplay are a same game played by a same player via different platforms.”

401. Barclay '019 discloses this claim for reasons stated above with respect to claim 5. (*Supra* §IX.E.6.)

20. Claim 19: “The system of claim 14, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

402. Barclay '019 discloses this claim for reasons stated above with respect to claim 8. (*Supra* §IX.E.9.)

21. Claim 20: “The system of claim 14, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

403. Barclay '019 discloses this claim for reasons stated above with respect to claim 11. (*Supra* §IX.E.12.)

F. Ground 6: Barclay '019 and Barclay '363 Render Obvious Claims 1-20.

1. Summary of Barclay '363

404. Barclay '363 was filed on March 29, 2012, before the earliest provisional application filing date of the '054 patent, and thus qualifies as prior art under §102(e). (EX1007, 1.) Barclay '363 was listed in an Information Disclosure Statement by Applicant. (EX1003, 175.) The Examiner did not apply Barclay in any of the Office Actions.

405. Barclay '363 and Barclay 019 are filed by the same Applicant, WMS Gaming, Inc. and share multiple inventors. Both are directed to social networking and wagering systems. (EX1007, Title; EX1006, Abstract.) Barclay '363

discloses additional ways that a gameplay of the video gaming application can be *modified* based on social *interactions* via a *social network service*. For example, “the system can use instructions indicated in friend accounts’ *comments* to *influence a gaming effect* during the wagering game player account's wagering game session. In some embodiments, instructions indicated in friend accounts’ *comments* can indicate *likes, dislikes, preferences, or some other voting feature related to the wagering game session that would specify what the wagering game player account should do during the wagering game session (e.g., vote for the player to bet more, vote for the player to bet more lines, vote for the player to select a specific item, vote for the player to stop a reel at a certain time, etc.)*” and the system can “*enforce the results of the vote (e.g., authorize the wagering game machine to bet for the wagering game player account based on audience vote).*” (EX1007, [0083].)

2. A POSITA would have been motivated to combine Barclay '019 and Barclay '363.

406. At the time of the alleged invention, it would have been obvious to a POSITA to combine Barclay '019 and Barclay '363. Barclay '019 and Barclay '363 are analogous references directed to integrating social networking functionality with wagering-game systems. (EX1006, Abstract, 2:40-56; EX1007, Title, Abstract, [0041].) Both references were filed by the same Applicant (WMS Gaming, Inc.), share multiple inventors, and address the same technological

problem of increasing player engagement and interaction through social-network activity integrated into wagering-game environments. *Id.* They also share similar figures and descriptions of the system architectures and user devices. (*See, e.g.*, EX1006, 14:50-19:46, FIGS. 8-12; EX1007, [0052]-[0061], FIGS. 2, 6-8.)

407. Barclay '019 discloses analyzing social-network interactions such as *comments, clicks, and views* and *modifying* gameplays. Barclay '363 discloses additional ways in which the *same types of social-network interactions such as comments clicks* can directly *“affect [and] control” the gameplay*. (EX1007, [0083].) For example, in Barclay '363, the social-network interactions *affect wager amounts, item selection, when to stop a reel, and presenting social-network content within the game (e.g., “present the comments on the reels”)*. (EX1007, [0083], [0072].) Because the references address the same field of endeavor, use compatible system architectures, and rely on the same types of social-network interactions, a POSITA would have been motivated to combine the teachings of Barclay '363 with Barclay '019 to improve user interaction, gameplay immersion, and wagering-game engagement.

408. Barclay '019 itself discloses claim 1. But to the extent claim 1 requires additional forms of gameplay modification beyond the reward mechanisms disclosed in Barclay '019 (which is not conceded), the Barclay-Barclay combination discloses this. For example, Barclay '019 discloses receiving

interactions via a social network service such as comments, clicks, and views, analyzing those interactions (*e.g.*, using keyword and condition analysis), and modifying the gameplay of the video gaming application by awarding points, benefits, and gameplay-related rewards. (*Supra* §IX.E.) Barclay '363 discloses additional techniques for modifying gameplay of the video gaming application based on the same social-network interactions. Thus, the Barclay-Barclay combination would perform the operations disclosed in Barclay '019 and would additionally enable more ways to automatically modify the gameplay as taught by Barclay '363, based on analysis of the interactions as taught by both references (*e.g.*, keyword-based analysis, condition-based analysis). The additional ways to modify the gameplay would include controlling the wagering gameplay and embedding social-network content in the wagering game as taught by Barclay '363.

409. A POSITA would have recognized that Barclay '019 already provided the infrastructure for parsing, categorizing, and evaluating social-network interactions, while Barclay '363 discloses additional gameplay effects that could be triggered by the same analyzed interactions. Further, Barclay '019 already discloses presenting comments and social communications during wagering-game play through in-game interfaces. (EX1006, FIG. 3.) Combining these teachings would have predictably enhanced player immersion and social interaction by

visually integrating social-network comments, friend activity, and social communications directly into the wagering-game environment itself. Further still, the Barclay-Barclay combination would have awarded users with items, rewards, privileges, and enhanced gameplay opportunities based on the same social-network interactions. Barclay '019 already discloses conditions and criteria for rewarding users based on comments and other social-network activity. (*Supra* §§IX.E.2.g-IX.E.2.i.) Barclay '363 discloses additional conditions, criteria, and reward mechanisms that could be incorporated into the reward framework of Barclay '019.

410. The Barclay-Barclay combination would yield the predictable result of enhanced interactivity, engagement, and commercial appeal of the wagering-game system by increasing user participation and encouraging ongoing social-network interaction. By incorporating Barclay '363's gameplay-control techniques into Barclay '019's keyword-analysis and reward framework, the combined system would provide a richer and more dynamic wagering-game environment in which social-network interactions directly affected gameplay outcomes, wagering decisions, visual game presentation, and player rewards. Such integration would encourage players and their social contacts to interact more frequently with wagering-game content because those interactions could produce meaningful gameplay effects and tangible rewards, which is the stated goals of both Barclay references. (EX1006, Abstract, 2:40-56; EX1007, Title, Abstract, [0041].)

411. The known benefits of Barclay '363 would prompt its application in the same field based on design incentives and market forces. The combination would improve Barclay '019 in the same way, for example, by improving gameplay personalization and social immersion. Barclay '363 teaches using audience comments and preferences to dynamically influence gameplay decisions, while Barclay '019 teaches detailed analysis of message content, keywords, and conditions associated with those messages. Combining these teachings would have enabled the wagering-game system to tailor gameplay behavior and rewards to real-time social-network activity and user feedback. This would have predictably improved the responsiveness and entertainment value of the wagering-game environment by transforming passive social-network comments into active gameplay modifiers and integrated gaming content. A POSITA would have recognized that the Barclay-Barclay system would motivate users to generate more social-network activity, invite additional users into the wagering environment, and remain engaged with the wagering-game platform for longer periods of time.

412. A POSITA would be motivated to use the known techniques of Barclay '363 to improve Barclay '019 in the same way. Barclay '019 provides a wagering game environment that has a social-network analysis framework, and Barclay '363's gameplay control would expand the wagering game environment. Both references disclose compatible server architectures and user devices. (*See,*

e.g., EX1006, 14:50-19:46, FIGS. 8-12; EX1007, [0052]-[0061], FIGS. 2, 6-8.)

Because Barclay '019 already disclosed parsing and analyzing social-network comments to determine rewards and gameplay-related effects, a POSITA would have found it straightforward to apply Barclay '363's gameplay-control mechanisms to those same analyzed interactions. The combination merely applies known social-network-driven gameplay control to a known social-network analysis system to achieve the predictable result of enhanced gameplay interactivity and user engagement.

413. It also would have been obvious to try combining Barclay '019 and Barclay '363. There were only a finite number of identified and predictable ways to use social-network interactions to modify wagering gameplay, including awarding points, granting privileges, displaying social content during gameplay, or directly affecting gameplay mechanics. Barclay '019 and Barclay '363 disclose complementary implementations of those known techniques using the same types of social-network interactions and similar wagering-game architectures. The combination would therefore have been straightforward and readily achievable by a POSITA with a reasonable expectation of success. Prior art such as Barclay '363 has successfully demonstrated that the direct gameplay control provides improved user experience, and thus there would have been a reasonable expectation of success for combining the two references.

3. Claim 1

a. 1[PR]: “A computer-implemented method using a plurality of computing devices in a cloud computing network, the method comprising:”

414. To the extent limiting, the Barclay-Barclay combination discloses this preamble for reasons discussed above with respect to 1[PR] in Ground 5. (*Supra* §§IX.F.2, IX.E.2.a.)

b. 1[A]: “providing access to a video gaming application operated in the cloud computing network to the plurality of computing devices;”

415. The Barclay-Barclay combination discloses this element for reasons discussed above with respect to 1[A] in Ground 5. (*Supra* §§IX.F.2, IX.E.2.b.)

c. 1[B][1]: “enabling a first computing device of the plurality of computing devices to participate in a first gameplay of the video gaming application via the cloud computing network,”

416. The Barclay-Barclay combination discloses this element for reasons discussed above with respect to 1[B][1] in Ground 5. (*Supra* §§IX.F.2, IX.E.2.c.)

d. 1[B][2]: “the first computing device participating in the first gameplay via a first gaming platform;”

417. The Barclay-Barclay combination discloses this element for reasons discussed above with respect to 1[B][2] in Ground 5. (*Supra* §§IX.F.2, IX.E.2.d.)

e. 1[C][1]: “enabling a second computing device of the plurality of computing devices to participate in a second gameplay of the video gaming application via the cloud computing network,”

418. The Barclay-Barclay combination discloses this element for reasons discussed above with respect to 1[C][1] in Ground 5. (*Supra* §§IX.F.2, IX.E.2.e.)

419. Barclay '363 discloses continuous gameplay by the same player across multiple devices. “For example, the system 500 can require that a player perform certain activities using the wagering game machine 560, or on different wagering game machines (e.g., require that the player play games at different locations, on different wagering game machines), to unlock a game application 548. The social networking website 503 and the wagering game machine 560 can report player activities and accomplishments back and forth to each other to update the game application 548 and unlock access to the game application 548, or access to different levels of the game application 548, once the player performs the activities.” (EX1007, [0081].)

420. In the example above, the second player participates in the second gameplay via their own device (*i.e.*, via a *second computing device* of the plurality of computing devices). As discussed, the Barclay-Barclay *video gaming application(s)* operate in a *cloud computing network*. (*Supra* §IX.F.3.b.) Thus, it would be obvious that the participation in the second gameplay of the video gaming application is via the cloud computing network.

f. 1[C][2]: “the second computing device participating in the second gameplay via a second gaming platform;”

421. The Barclay-Barclay combination discloses this element consistent with the '054 patent.

422. As discussed above, the Barclay-Barclay combination discloses various types of gaming platforms that provide gameplays, consistent with the '054 patent. (*Supra* §IX.F.3.d). A POSITA would thus understand that any gameplay, including the first and the second gameplay, would be via one of those gaming platforms.

g. 1[D]: “receiving one or more interactions via a social network service in association with an event from one of the first gameplay and the second gameplay of the video gaming application;”

423. The Barclay-Barclay combination discloses this element.

424. As discussed above, Barclay '019 discloses this element. (*Supra* §IX.E.2.g.)

425. For example, FIG. 4 of Barclay '363 shows an *event* (winning of 500 credits) from a gameplay is posted to the *social network service* (“FACEPAGE”). “The wagering game machine 460 presents a congratulatory message 402 that indicates that the player account 471 wins a certain amount. The system 400 also includes a computer 437 connected a social network server 480 via the communications network 422. The computer 437 presents a web browser 440. The web browser 440 presents a social network website 441 hosted by the social network server 480. The system 400 transfers a *message of the win* to the *social*

network server 480, which presents a status indicator comment 482 about the player account's win in a status feed console 444.” (EX1007, [0067]; *see also id.*, [0070] (“the system can indirectly connect to the social networking website by **sending instructions** to a **social network server** to post the social networking message”).)

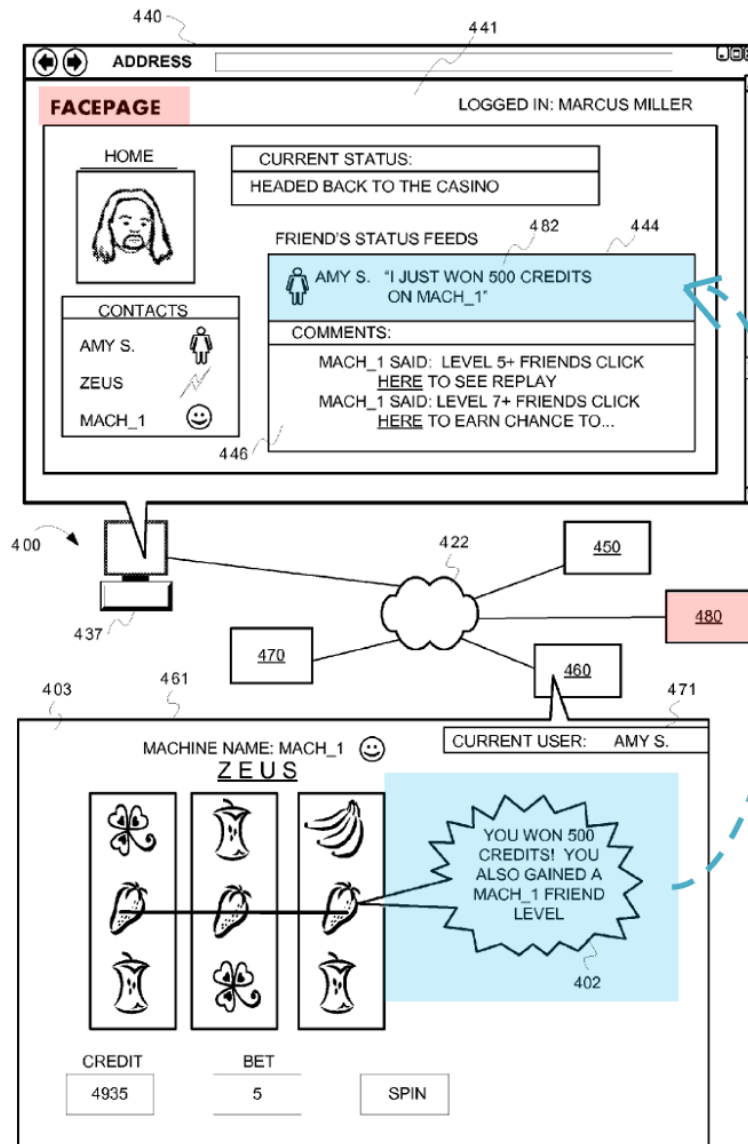


FIG. 4

426. Barclay '363 discloses receiving *interactions* via a social network service in association with the *event*. Specifically, “the system can receive *comments* [on the *social networking message*] from social networking contacts associated with the social network account. . . .” (EX1007, [0072].) As another example, “the system can monitor the player-owned social network account for *social networking communications* from one or more social-contact-owned social network accounts (‘friend accounts’) associated with the player-owned social network account. The friend accounts can send the *social networking communications* using social networking communication features of the *social networking website*.” (*Id.*, [0082].)

427. Barclay '363 discloses that these *comments* and *social networking communications* include instructions that “indicate likes, dislikes, preferences, or some other voting feature *related to the wagering game session* that would specify what the wagering game player account should do during the wagering game session.” (EX1007, [0083].) Here, the *interactions* are in association with the *event[s]* from a gameplay (*e.g.*, first or second gameplay).

h. 1[E]: “determining an influence to one of the first gameplay and the second gameplay of the video gaming application based on the one or more interactions via the social network service;”

428. The Barclay-Barclay combination discloses determining an *influence* to one of the first gameplay and the second gameplay of the video gaming

application based on the one or more *interactions* via the *social network service*.

As discussed above, Barclay '019 discloses this element. (*Supra* §IX.E.2.h.)

429. Barclay '363 states, “the system can use social networking activity by friend accounts to affect or control the wagering game player account associated with the player-owned social contact account. For example, the system can use instructions indicated in friend accounts' *comments* to *influence* a gaming effect during the wagering game player account's wagering game session. In some embodiments, instructions indicated in friend accounts' comments can indicate *likes, dislikes, preferences, or some other voting feature related to the wagering game session that would specify what the wagering game player account should do during the wagering game session (e.g., vote for the player to bet more, vote for the player to bet more lines, vote for the player to select a specific item, vote for the player to stop a reel at a certain time, etc.)*. The system can present the results of the vote on a display on a wagering game machine that the wagering game player account is using during the wagering game session. In some embodiments, the wagering game player account can authorize the system to enforce the results of the vote (e.g., authorize the wagering game machine to bet for the wagering game player account based on audience vote).” (EX1007, [0083])

i. **1[F]: “and modifying one of the first gameplay and the second gameplay of the video gaming application based on the influence.”**

430. The Barclay-Barclay combination discloses *modifying* one of the first gameplay and the second gameplay of the video gaming application based on the *influence*. As discussed above, Barclay '019 discloses this element. (*Supra* §IX.E.2.i.)

431. In a first example, Barclay '363 discloses that the system can *affect or control* the game, such as determining how much to bet, which item to select, when to stop a reel, etc. “[T]he system can use social networking activity by friend accounts to *affect or control* the wagering game player account associated with the player-owned social contact account. For example, the system can use instructions indicated in *friend accounts' comments* to *influence* a *gaming effect* during the wagering game player account's wagering game session. In some embodiments, instructions indicated in friend accounts' comments can indicate *likes, dislikes, preferences, or some other voting feature related to the wagering game session that would specify what the wagering game player account should do during the wagering game session (e.g., vote for the player to bet more, vote for the player to bet more lines, vote for the player to select a specific item, vote for the player to stop a reel at a certain time, etc.)*. The system can present the results of the vote on a display on a wagering game machine that the wagering game player account is using during the wagering game session. In some embodiments, the wagering game player account can authorize the system to *enforce the results of the vote*

(e.g., authorize the wagering game machine to bet for the wagering game player account based on audience vote).” (EX1007, [0083].)

432. In a second example, Barclay ’363 *integrates or rewards the second user* in the game. “[I]f a social-contact-owned social network account (i.e., a *friend account*) makes a *comment* for the player-owned social network account, the system can *make the friend account eligible to be integrated into the game or be eligible for some reward*. If the friend account also owns a wagering game player account, the system can *make the friend account's player account eligible to receive rewards on the wagering game network*.” (EX1007, [0084].) “In another example, the system can provide *rewards to the wagering game player account (e.g., a promotion, a privilege, etc.)* based on an amount of social networking communication received by friend accounts during the wagering game session. For example, the system can present a stacked wilds feature, which grants the wagering game player account eligibility for more wilds based on the amount of social networking activity (e.g., for every ten friend account comments, the system makes the wagering game player account eligible for another wild). In another example, the system can provides opportunities for a player to increase their chances of receiving a bonus reward or performing better in a bonus game or a wagering game (e.g., a better chance of continuing a cascade, a better chance of

getting a multiplier, etc.) based on an amount of social networking communications by friend accounts.” (*Id.*, [0085].)

433. As a third example, Barclay ’363 *gives rewards, items, or opportunities to the first user*. “[T]he system can *provide rewards to the wagering game player account (e.g., a promotion, a privilege, etc.)* based on an amount of *social networking communication* received by *friend accounts* during the wagering game session. For example, the system can *present a stacked wilds feature, which grants the wagering game player account eligibility for more wilds* based on the amount of *social networking activity* (e.g., for every ten friend account comments, the system makes the wagering game player account eligible for another wild). In another example, the system can *provides opportunities for a player to increase their chances of receiving a bonus reward or performing better in a bonus game or a wagering game (e.g., a better chance of continuing a cascade, a better chance of getting a multiplier, etc.)* based on an amount of *social networking communications* by friend accounts.” (EX1007, [0085].)

434. In a fourth example, Barclay ’363 *displays the social network activity (e.g., comments) in the gameplay*. “[T]he system determines *social networking activity* performed by one or more social-contact-owned social network accounts, which are linked to the player-owned social network account, and *presents the social networking activity on the wagering game machine* during the wagering

game session. In some embodiments, the system can monitor the player-owned social network account for social networking communications from one or more social-contact-owned social network accounts (‘friend accounts’) associated with the player-owned social network account. The friend accounts can send the social networking communications using social networking communication features of the social networking website. The system can *format the social networking communication for presentation on the wagering game machine, and present the communication on the wagering game machine* (see FIG. 1 for an example of the system 100 presenting the comment feature 143 by the social network account 144 on the comment application 108 on the wagering game machine 160). In some embodiments, the system can *present the social networking communication as part of the wagering game.*” (EX1007, [0082]; *see also id.*, [0048].) It would have been obvious that the *social networking activity* includes *comments* to a post, including a post about the gameplay.

the comments to the wagering game network to *present on a wagering game machine associated with the wagering game session*. In another example, the system can *incorporate the comments into the wagering game (e.g., present the comments on the reels, include images of social networking contacts who made the comments, etc.)*. Additionally, the system can *reward friends for commenting*.” (EX1007, [0072].)

436. The modifications are made to the “wagering game” and “wagering game session,” and thus, are modifications of a gameplay (e.g., first or second gameplay) of the video gaming application. (EX1007, [0072], [0082]-[0085].)

4. Claim 2: “The computer-implemented method of claim 1, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

437. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 2 in Ground 5. (*Supra* §§IX.F.2, IX.E.3.) Barclay ’363 also discloses a “social network messaging application.” (EX1007, [0069].)

5. Claim 3

a. 3[A]: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and”

438. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 3 in Ground 5. (*Supra* §§IX.F.2, IX.E.4.)

439. Further, in a first example, the first player is a player who plays a wagering game and posts and the second player is a voter (*e.g.*, commenter to the post to vote or indicate preference). As discussed above, Barclay '363 states that “friend accounts can send the social networking communications” and “the system can use instructions indicated in friend accounts’ comments to influence a gaming effect during the wagering game player account’s wagering game session.” (EX1007, [0082]-[0083].) Barclay '363 discloses that the first gameplay and the second gameplay is a shared gameplay, as the friend accounts’ comments (*e.g.*, the second gameplay) influence a gaming effect during the first player’s wagering game (*e.g.*, the first gameplay). These commenters are also participating in the same gameplay.

440. In a second example, the Barclay-Barclay combination enables participation in a gameplay (a *shared gameplay*) of the video gaming application by the same player via different computing devices (a *first* and *second computing device*). As discussed above, Barclay '019 discloses that “the in-casino activity can be a continuation of a *persistent-state game* that is played outside the casino[.]” (*Supra* §IX.E.2.e; EX1006, 8:29-31.) Further, Barclay '363 encourages players to play on different wagering game machines to unlock access to different levels of the game application and thus discloses, or renders obvious, allowing the first and second gameplay to be a persistent-state game (*e.g.*, a shared gameplay)

shared across different devices. (*Supra* §IX.E.2.e; EX1007, [0081].) A POSITA would understand, and it would be obvious, that the game states would be stored in association with the player's account in the cloud to be accessible across different devices. Thus, the Barclay-Barclay combination discloses, or renders obvious, allowing a shared gameplay to be played by the same player across different devices.

b. 3[B]: “wherein the first computing device is a personal computer and the second computing device is a mobile device.”

441. The Barclay-Barclay combination discloses this element.

442. As discussed above, Barclay '019 discloses that the wagering game session can be accessed via different devices such as “a computer system, a personal digital assistant (PDA), a cell phone, a laptop” (EX1006, 15:38-45; *see also id.* 19:8-16.)

443. The Barclay-Barclay combination thus discloses a configuration in which the first player would use a personal computer (e.g., “a laptop”) as a first computing device to participate in the gameplay and the second player would participate in the gameplay through a mobile device (e.g., “a cell phone”). (EX1006, 15:38-45; *see also id.* 19:8-16.)

6. Claim 4: “The computer-implemented method of claim 3, wherein the first player and the second player have different levels of capability in the shared gameplay.”

444. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 4 in Ground 5. (*Supra* §§IX.F.2, IX.E.5.)

445. Further, in Barclay '363, the first player (e.g., the player who plays a wagering game and posts) has full capability in the game. The first player “can connect to the Internet and play wagering games” and “publish[] the message 312 to one or more social networking venues[.]” (EX1006, 1:39-42, 9:48-54; *see also id.*, 3:1-24.) In contrast, the second player has limited capability in the shared gameplay as the second player only has commenting or voting power. In other words, the second player can affect the shared gameplay through comments with instructions indicating likes, dislikes, votes and preferences, but may not do anything more to affect the shared gameplay unlike the first player.

7. Claim 5: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are a shared game played by a same player via different platforms.”

446. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 5 in Ground 5. (*Supra* §§IX.F.2, IX.E.6.)

447. As discussed above, the Barclay-Barclay combination enables participation in a gameplay (a *shared gameplay*) of the video gaming application by the same player via different computing devices (a *first* and *second computing device*). (*Supra* §IX.F.5.) In other words, a player may participate in a first gameplay when accessing the game through a computing device (e.g., a personal computer), and participate in a second gameplay (part of a shared gameplay) when accessing the game through a different computing device (e.g., a mobile device).

448. As discussed above, the Barclay-Barclay combination discloses different platforms for participating in the gameplays. (*Supra* §§IX.F.3.d, IX.F.3.f.) Therefore, it would have been obvious that the player would access the game via different platforms at different times.

8. Claim 6: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a same gaming platform.”

449. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 6 in Ground 5. (*Supra* §§IX.F.2, IX.E.7.)

9. Claim 7: “The computer-implemented method of claim 1, wherein the first gameplay and the second gameplay are different games played by different players via a different gaming platform.”

450. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 7 in Ground 5. (*Supra* §§IX.F.2, IX.E.8.)

10. Claim 8: “The computer-implemented method of claim 1, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

451. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 8 in Ground 5. (*Supra* §§IX.F.2, IX.E.9.)

11. Claim 9: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social network service that enables users of the video gaming application to send text-based posts.”

452. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 9 in Ground 5. (*Supra* §§IX.F.2, IX.E.10.)

Barclay '363 also discloses “linking the linked wagering-game-machine-owned social network account to the player-owned social network account via a *social-contact linking application* for the social network.” (EX1007, Claim 14.) “Some examples of linking features on some known *social network websites* include the friend connection feature for *Facebook™* and the follower subscription feature for *Twitter™*.” (EX1007, [0073].) “The wagering game server can use the social-network-account logon information to connect, or logon, to the player-owned social network account.” (*Id.*, [0066].)

12. Claim 10: “The computer-implemented method of claim 1, wherein the video gaming application is linked with the social network service to enable text-based posts to be broadcasted for the event from one of the first gameplay and the second gameplay.”

453. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 10 in Ground 5. (*Supra* §§IX.F.2, IX.E.11.)

13. Claim 11: “The computer-implemented method of claim 1, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

454. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 11 in Ground 5. (*Supra* §§IX.F.2, IX.E.12.)

14. Claim 12: “The computer-implemented method of claim 11, wherein the social network application is included in the video gaming application.”

455. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 12 in Ground 5. (*Supra* §§IX.F.2, IX.E.13.)

Barclay '363 discloses a “comment application 108 [that] can present a comment copy 111 as well as controls to reply to the comment.” (EX1007, [0047].) The comment copy 111 corresponds to a comment by social network user Amy S on a *social networking website (e.g., Facepage)*. “The comment application 108 may be an *integrated feature* of the wagering game application 103.” (EX1007, [0047], FIG. 1; *see also id.*, [0048].) Thus, Barclay '363 also discloses including the *social network application* in the *video gaming application*.

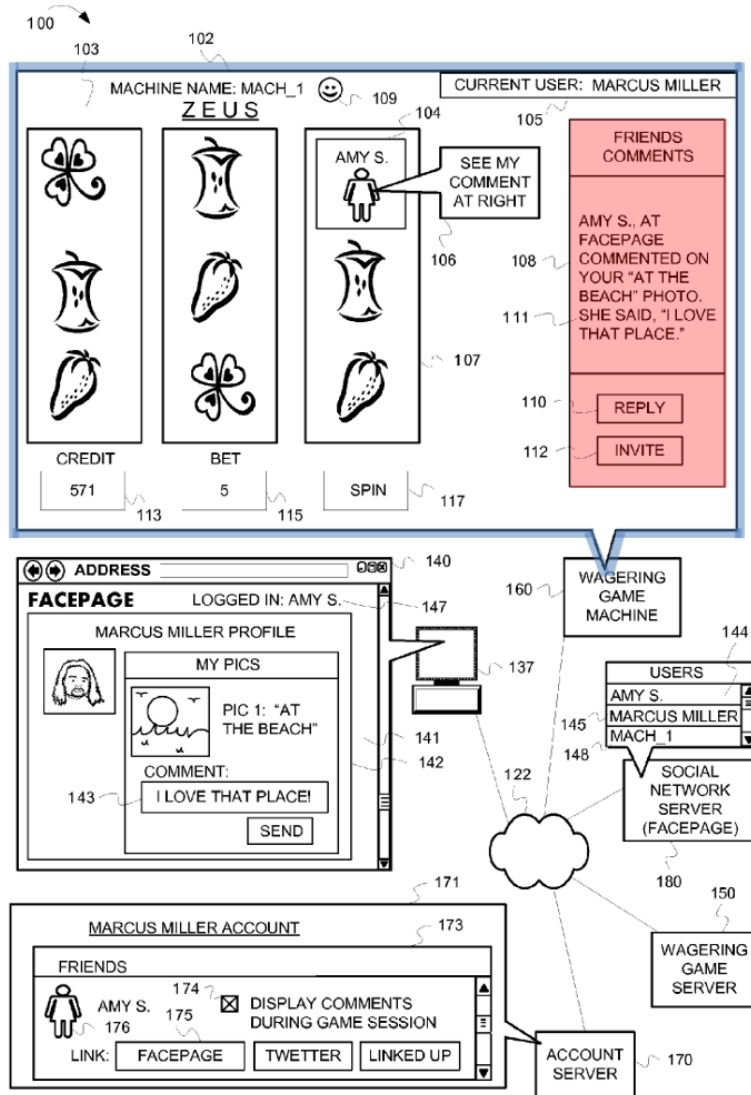


FIG. 1

15. Claim 13: “The computer-implemented method of claim 11, wherein the social network application is a stand-alone third-party application coupled to the video gaming application.”

456. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 13 in Ground 5. (*Supra* §§IX.F.2, IX.E.14.) Barclay ’363 states that “the **social networks** can be hosted by social network servers separate from, and/or external to, the wagering game network [hosting the **video gaming application**].” (EX1007, [0066], FIG. 1; *see also id.*, [0057].)

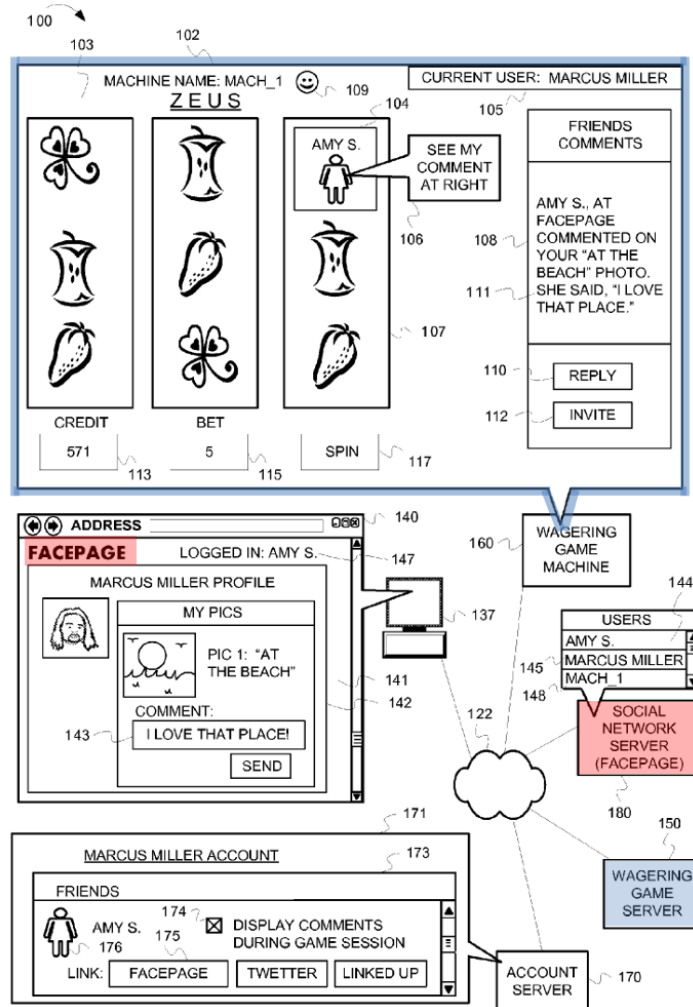


FIG. 1

16. Claim 14

457. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 14 in Ground 5. (*Supra* §§IX.F.2, IX.E.15, IX.F.3.)

17. Claim 15: “The system of claim 14, wherein a gaming platform is one of a mobile device, a game console, a social network messaging application, and a social website.”

458. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 15 in Ground 5. (*Supra* §§IX.F.2, IX.E.16, IX.F.4.)

18. Claim 16: “The system of claim 14, wherein the first gameplay and the second gameplay are a shared gameplay that is shared across the first computing device and the second computing device by a first player and a second player, respectively, and wherein the first computing device is a personal computer and the second computing device is a mobile device.”

459. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 16 in Ground 5. (*Supra* §§IX.F.2, IX.E.17, IX.F.5.)

19. Claim 17: “The system of claim 16, wherein the first player and the second player have different levels of capability in the shared gameplay.”

460. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 17 in Ground 5. (*Supra* §§IX.F.2, IX.E.18, IX.F.6.)

20. Claim 18: “The system of claim 14, wherein the first gameplay and the second gameplay are a same game played by a same player via different platforms.”

461. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 18 in Ground 5. (*Supra* §§IX.F.2, IX.E.19, IX.F.7.)

21. Claim 19: “The system of claim 14, wherein game content in the first gameplay and the second gameplay is platform agnostic.”

462. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 19 in Ground 5. (*Supra* §§IX.F.2, IX.E.20, IX.F.10.)

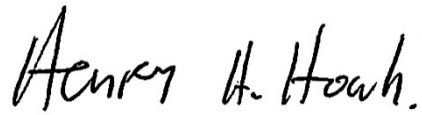
22. Claim 20: “The system of claim 14, wherein the video gaming application is linked with a social network application that enables social network activities to affect one of the first gameplay and the second gameplay.”

463. The Barclay-Barclay combination discloses this claim for reasons discussed above with respect to claim 20 in Ground 5. (*Supra* §§IX.F.2, IX.E.21, IX.F.13.)

* * *

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code.

Dated: July 22, 2026

A handwritten signature in black ink that reads "Henry H. Houh." The signature is written in a cursive style with a period at the end.

Henry H. Houh