

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

MULLEN INDUSTRIES LLC,
Patent Owner.

Case No. IPR2025-00746
U.S. Patent No. 10,974,151

PATENT OWNER'S PRELIMINARY RESPONSE

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Mullen Industries LLC (“Patent Owner” or “Mullen”) submits this Preliminary Response to the Petition for *Inter Partes* Review (“Petition”) of U.S. Patent No. 10,974,151 (“the ’151 Patent”) filed by Meta Platforms, Inc. (“Petitioner”).

I. Introduction

The ’151 patent improves upon prior-art that required users to control virtual movement through artificial inputs like joysticks or buttons, resulting in a disjointed and unintuitive experience. It also addresses the safety risks of traditional systems, where a user’s vision is obscured by a headset, increasing the likelihood of collisions with surrounding objects. While earlier systems attempted to mitigate these risks by confining users to small, rail-enclosed platforms, they still failed to allow for natural physical interaction. The ’151 patent overcomes these limitations by enabling users to move freely through real-world space and have that motion mapped to a virtual game character, eliminating the need for headsets or confined spaces and allowing for immersive, location-based gameplay using mobile devices.

The Petition challenges independent claim 1 of the ’151 patent on a single ground relying solely on Levine. However, Levine fails to disclose or render obvious at least three key limitations of independent claim 1.

The Petition relies on two embodiments in Levine, the so-called “sniper” game and the “monster” game, which reflect two distinct game designs in Levine.

The “sniper” game reflects the graphics-intensive embodiment in which a game is displayed to a mobile user on a device with sufficient processing power at the time of the reference, *e.g.*, a Palm Pilot, but notably not a mobile phone. The “monster” game reflects the lightweight game design embodiment that can be played on a mobile phone, in which graphics are not displayed to the mobile phone user, but rather the laptop user messages the mobile phone user that a monster is nearby and the mobile phone user interacts with the monster by pressing buttons on his or her keypad. Despite the Petition’s attempt to mix and match parts of each embodiment, hardware restrictions at the time made that impossible, which is why Levine has the two game types.

First, Levine’s “sniper” game does not disclose or render obvious that it is “operable to be played on said wireless telephone.” The Petition argues that the “sniper” game, only disclosed as being played on a “Palm Pilot,” could be played on a wireless telephone because a POSITA would have found it obvious in light of Levine’s “monster” game. But mobile phones at the time did not have the capability of running such graphically intense games, and the “sniper” game would not be suitable considering the complex systems it requires to run and display the game on a mobile phone.

Second, Levine’s “monster” game does not disclose or render obvious that the user’s mobile phone displays the “location-based video game character.” The

Petition points to the “player’s character” as the “location-based video game character.” However, the “monster” game provides only a message-based experience for the mobile user, and the “player’s character” is not displayed on the mobile device. The Petition also argues that a modification to the “monster” game to display the “player’s characters” would be obvious in light of the “sniper” game. However, again, due to hardware constraints at the time, it would not be a simple and obvious modification to display the “player’s character” on the mobile user’s screen; the reference goes out of its way to come up with a less-than-ideal method of gameplay that would work with the mobile phone hardware restrictions at the time, and it is impermissible hindsight to say it would be simple to display the game visuals on the mobile phone screen.

Third, Levine’s “sniper” game also does not disclose or render obvious that “a manual control is operable to cause said location-based video game character to perform an action.” The Petition argues that although Levine does not explicitly describe it, a POSITA would know the user could act as a sniper and use a manual input to shoot the “victim” in the sniper game. But in Levine, the sniper shoots automatically based on the locations of the users, *i.e.*, when the victim comes “in range” of the sniper. Nothing indicates the user can “shoot” via manual control.

The Board should thus deny institution under 35 U.S.C. § 314(a).

II. Technology Primer And Prior Art Problem

Traditional virtual reality systems at the time of the challenged patent obstructed the user's view and thus were confined to a small area for safety reasons, were hardware-intensive, and were unintuitive to use. Typically, users are immersed in alternate realities via headsets and navigate those environments using manual input devices, but "such traditional virtual reality systems are deficient because of the need for additional, unneeded manual actions to be made to move a joystick in order to move the user through the alternate reality." Ex. 1001, 1:25–36. This disconnect between user motion and game input reduces immersion and hinders natural interaction.

These systems also pose safety risks. Because the user's view is completely obstructed by a virtual display, "a user cannot visually see his/her physical environment." *Id.*, 1:38–39. Although "guard rails are typically provided such that a user cannot stray from the virtual reality platform," the user may "lose a sense of direction as to where such rails are located," increasing the risk of dangerous contact with barriers or foreign objects resulting in a system that not only limits movement but introduces physical hazards. *Id.*, 1:40–46.

The '151 patent addresses these deficiencies through a different approach: an "actuality" game system in which "a user's physical (actual) location on a playfield reflects a virtual game character's virtual location in a video game environment."

Id., 2:30–34. Rather than moving a joystick to control an avatar, players move through real-world space, and that motion is mapped directly to the virtual playfield for their virtually displayed character. In this way, “a location-based game where a user’s location on a physical playfield corresponds to a video game character’s location on a virtual video game playfield” is realized. *Id.*, 2:35–38.

For example, a wireless telephone may be used to play a game of PACMAN where “a user may look down at a display screen, see his/her character, and run around his/her physical environment in order to similarly run his/her virtual character through a virtual maze.” *Id.*, 3:50–62.

This technology enables location-based video game systems to deliver immersive and adaptive gameplay experiences, where a player’s real-world movements control their virtual character’s actions. By anchoring these virtual elements to real-world actions, the system creates gameplay that feels both physically grounded and highly responsive, delivering a level of realism and interaction beyond what traditional virtual reality systems can offer.

These innovations are captured in the claims as demonstrated by claim 1, which states:

1. A system comprising:
a wireless telephone having a locating device and a
display, wherein a location-based video game is *operable*

to be played on said wireless telephone, first location-based control signals are operable to be utilized, at least in part, to control a location-based video game character in said location-based video game, *a manual control is operable to cause said location-based video game character to perform an action*, said *location-based video game character is operable to be displayed on said display*, a second video game character that is operable to be controlled via artificial intelligence, and is not controlled by manual-input, is operable to be displayed on said display, and said first location-based control signals are provided by said locating device, wherein said locating device includes an accelerometer.

Id., claim 1.

III. Claim Construction

Patent Owner submits that no express claim construction is necessary for the purposes of this Preliminary Response. The challenged claims should be given their plain and ordinary meaning, consistent with the specification and as understood by a person of ordinary skill in the art. Even under this standard, however, the Petition fails to demonstrate that the prior art discloses or renders obvious all of the limitations of the challenged claims.

IV. The Petition

The Petition asserts one ground.

Ground	Claims	Basis for Challenge under §103
1	1-3	Obvious over Levine

The sole challenged independent claim is claim 1 and is addressed in this preliminary response.

A. Levine

Levine describes a computer network system which facilitates multi-person interaction. Levine describes a “Grid” system which acts as a host “for the context of the application (i.e., game) while being agnostic to about the context itself.” Ex. 1003, ¶ [0179]. Levine also describes “client-controlled objects” as “Avatars” where any “object ultimately connected to a real human player is an Avatar,” as well as “Active Objects (NPCs),” as “non-player controlled objects,” such as the “monster.” *Id.*, ¶¶ [0393]–[0394], [0659].

The system also describes a “dead reckoning system” which it illustrates by way of a “sniper” example and in Figure 47, where a smaller box 4703 represents how big the sniper is as its “region of presence” and a larger box 4704 represents how far the sniper is able to see as its “region of interest.” *See id.*, ¶¶ [0557]–[0558], Fig. 47. Levine describes how the bicyclist seen in Figure 47 is hosted on a different “host” (i.e., Grid) and that the bicyclist is touching the “region of presence” of the sniper whereby “messages are routed about the bicyclist colliding with the sniper.”

Id., ¶ [0557]. On the right side of Figure 47 Levine shows what a user sees on the screen, which is one or more characters, but without any information about where in the virtual world the characters are located.

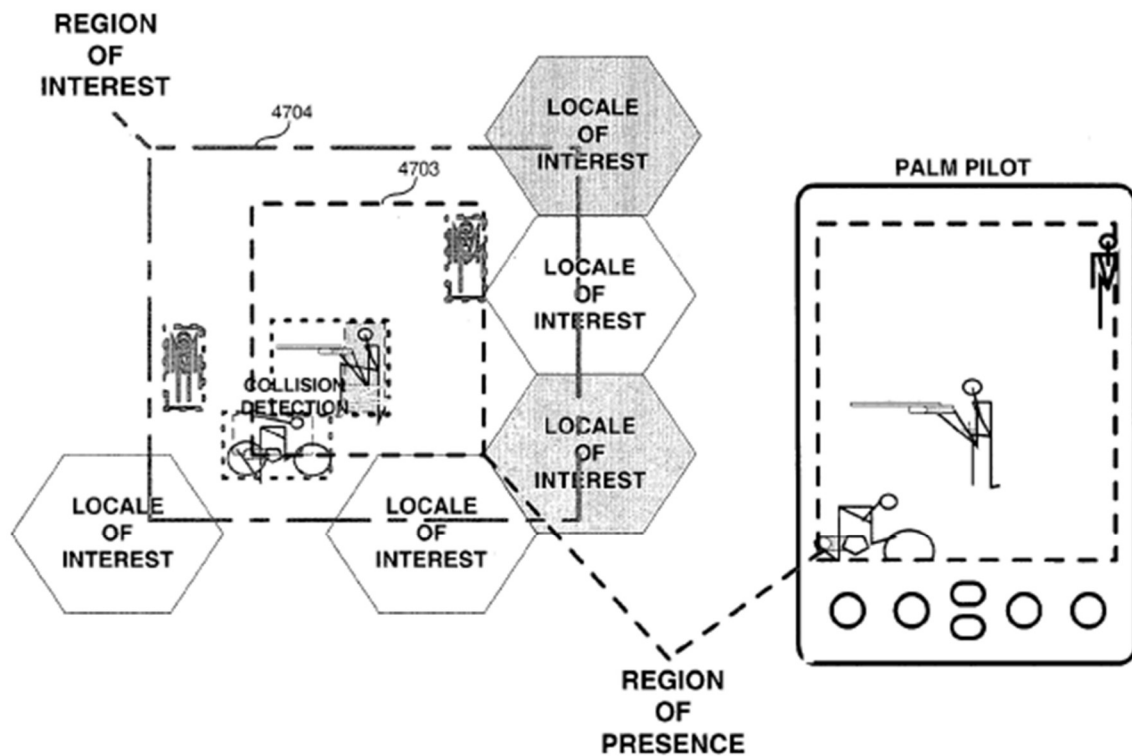


FIG. 47

Pet., 43; Ex. 1003, Fig. 47.

The system also describes other games, such as the “monster” game, which includes a “laptop user” and a “mobile user.” Ex. 1003, ¶ [0663]- [0664]. The game proceeds where a “monster” may appear and “a user on a laptop client device 112e (‘laptop user’) would now ‘see’ the new ‘monster’ character on their laptop.” *Id.*, ¶ [0663]. The laptop user then “sends a message to a user of a mobile phone client device 112a (‘mobile user’),” informing the mobile phone user that “a new ‘monster’

character” has appeared. *Id.*, ¶ [0664]. The mobile phone user can then “interact with ‘monster’ character” by “pressing *9999 on their mobile phone client device 112a to kill the ‘monster’ character.” *Id.*, ¶ [0666]. The mobile phone user may instead “run away” from the monster they were informed of by the laptop user by taking a taxi and moving away. *Id.*, ¶ [0670].

V. Board Should Deny Institution Because The Petition Does Not Establish The Required Reasonable Likelihood of Success

The Petition relies on two embodiments within Levine, which are not compatible with one another, and neither of which renders the claims obvious—the “sniper” game and the “monster” game. Pet., 22–23, 26, 28–30. As with all embodiments in Levine, there are two designs for implementing a game described in the reference, and the two embodiments the Petition relies on each take one of the two approaches: if the user is using a mobile phone, he or she plays a message-based game without visuals, and if a mobile user needs to see visuals, the system is designed such that he or she uses a higher-power device (at the time), such as a laptop or Palm Pilot, that is capable of displaying those visuals while simultaneously performing the other necessary tasks for the game.

As explained more fully below, the “sniper” game is a graphics-intensive game (for the time period, as Levine was filed in 2003 and claims priority back to 2000) that needs more processing power to display the characters and thus is

described as being played on a Palm Pilot, not a mobile phone, and so does not meet the claims, which are required to be played on a “wireless telephone.” *Id.*, 31–32; Ex. 1003, ¶ [0558]. Wireless telephones of the time period could not display the sniper game. If they had been able to, the inventors would have listed the mobile phone as an option for the playing the sniper game, just as it did for the lightweight, visual-free (for the mobile user) “monster” game.

By contrast, the other embodiment the Petition relies on, the “monster” game, is described as being played on a mobile phone, but, apparently due to perceived processing limitations, the virtual characters are *not* displayed to the mobile phone users; instead, only “a user on a laptop client device 112e (‘laptop user’) would now ‘see’ the new ‘monster’ character on their laptop,” and the mobile user gets the information about the virtual character location via message from the laptop user. Ex. 1003, ¶ [0663]; *see also* ¶ [0664] (“In step 5812, the laptop user sends a message to a user on a mobile phone client device 112a (‘mobile user’). Such message, for example, would convey that ‘a new monster character is two blocks from you.’”). Then, the mobile user can “interact with monster character” by “pressing *9999 on their mobile phone client device 112a to kill the ‘monster’ character.” *Id.*, ¶ [0666]. The steps are shown in Figure 58:

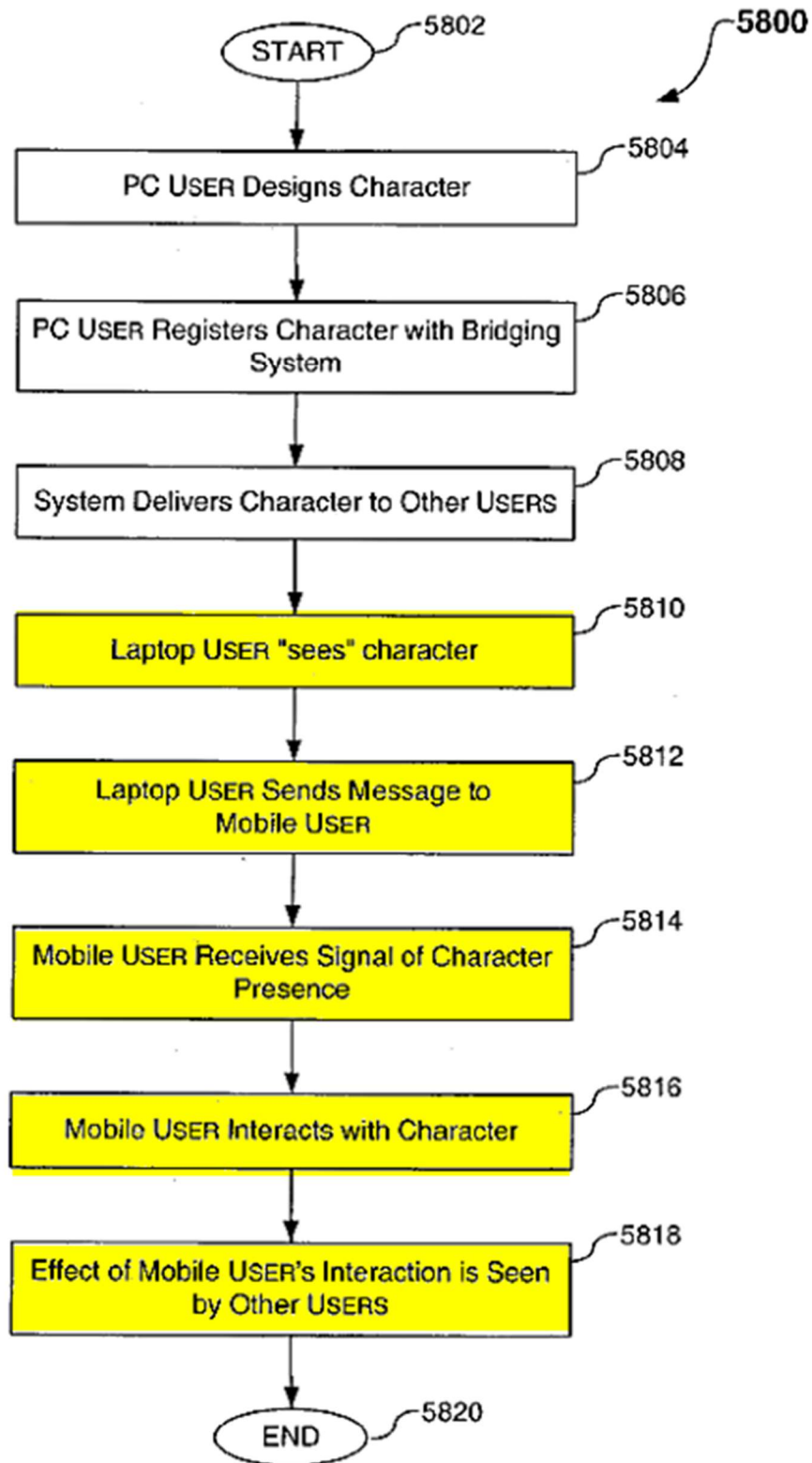


FIG. 58

Id., Fig. 58 (annotated). The mobile user does not “see” any character. He or she receives a message and interacts with the character, as explained above, by pressing buttons on his or her mobile phone.

A. The Sniper Game Is Not “Operable To Be Played On Said Wireless Telephone”

The Petition argues that the “sniper” game, which is only disclosed as being played on a “Palm Pilot,” could be played on a wireless telephone because a POSITA would have found it obvious given Levine’s “teachings” and “listing examples of types of client devices” its “monster” game may be played on. Pet., 31–32; Ex. 1003 ¶ [0187].

Levine explicitly describes the “sniper” game as implemented on a Palm Pilot device, with no corresponding disclosure of the “sniper” game running on a wireless telephone. *See* Ex. 1003, ¶ [0558]. The mere fact that Levine contemplates a range of client devices for playing various games does not equate to a teaching that the “sniper” game is operable on all such devices. Instead, Levine’s description of multiple hardware platforms is not a disclosure that every game is operable on every device.

The Petition asserts that a POSITA would find it obvious to implement the “sniper” game on a wireless telephone based on Levine’s general teachings of “cross-platform” rendering of a “monster” in the “monster” game. Pet., 32 (citing

Ex. 1003 ¶¶ [0663], [0666], [0675]–[0676]). However, as described above and explained more fully in the sections below, the “monster” game does not display any character to the mobile user; he or she plays a message-based game only. The Petition makes no attempt to explain how a POSITA would adapt the gameplay mechanics, user interface interactions, and server communications described in connection with a Palm Pilot implementation to a mobile phone platform. Instead, it relies solely on Levine’s general statements about rendering across different platforms. *See* Pet., 32.

Levine’s disclosure of the “sniper” game is not a simple, interchangeable video game experience with the mobile “monster” game. Rather, it involves a detailed system of area-of-interest management, packet routing, and server-to-client communication infrastructure, all of which are tightly integrated with the gameplay logic and user experience. *See, e.g.*, Ex. 1003 ¶¶ [0556]–[0558], [0569]–[0573]. The “sniper” game mechanics include displaying multiple users’ Avatars such as a “sniper” and “bicyclist” where the bicyclist is hosted on a different server yet still displayed on the Palm Pilot. *Id.*, ¶¶ [0556]–[0557]. As well as dynamic “collision” detection based on proximity of Avatars across distributed servers. *Id.*, ¶¶ [0557], [0571]. Additionally, it includes the maintenance of internal server-side lists for routing message packets between the users. *Id.*, ¶¶ [0570]–[0571].

To the extent the Petition is arguing that, because the “monster” game is rendered across devices including a mobile phone, it would have been obvious to implement the “sniper” game on a mobile phone as well, that argument fails. As explained in Section V.B, the “monster” game does not depict characters on a mobile phone for the benefit of the mobile phone user, but instead renders those characters only to the computer users.

Moreover, the Petition’s statements on alleged cross-platform compatibility focus on graphic representation and interface standardization, not on porting gameplay systems or adapting server-client communication infrastructure to a wireless phone. *See* Pet., 32. Rendering uniformity does not equate to gameplay operability, and the Petition provides no rational or technical explanation for how the “sniper” game’s required multiplayer communication systems, server coordination, and user collision detection, all of which are necessary to display characters, could be implemented on a fundamentally different class of device with significantly more limited capabilities. *See* Ex. 1003, ¶¶ [0556]–[0558], [0569]–[0573].

It would not have been obvious at the time to implement a game like the “sniper” game on a mobile phone, whether in light of the “monster” game or any other reference. Mobile phones of that era were extremely limited in terms of processing power, memory, battery life, graphics rendering capabilities, and network

bandwidth. The type of games playable on mobile phones at the time were basic, low-resolution single-player games, simple tile-based puzzles, or arcade games, not multiplayer games with displayed synchronized interaction across distributed servers.

At the outset, the Petition's attempt to use references that do not appear in any of the grounds to supply the missing limitation regarding the sniper game is improper. Pet., 12–19; *Intel. Corp. v. Pact XPP Schweiz AG*, No. 2023-1537, 2024 U.S. App. LEXIS 31389 (Fed. Cir. Dec. 11, 2024) (nonprecedential) (affirming Board's refusal to consider a reference not included in the asserted grounds where the Petition relied on it to supply a missing claim limitation, rather than as background knowledge).

Regardless, the Petition's examples prove the limited processing and display abilities of mobile phones at the time. The types of games shown as examples on mobile devices in the Petition, such as the Nokia phone games, are low-resolution single player arcade and puzzle games that do not require multiplayer communication with synchronized interaction across distributed servers. *See* Pet., 14–15.

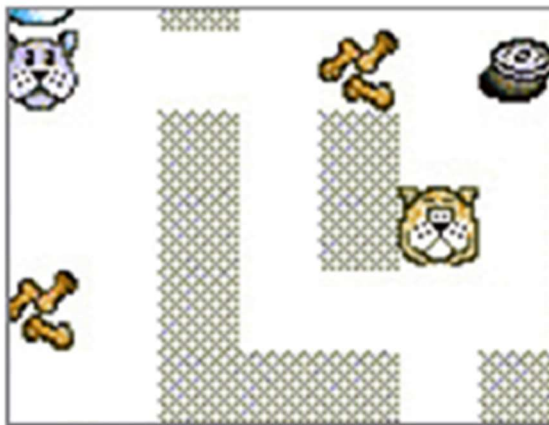


Pet., 14, Nokia webpage, <https://web.archive.org/web/20021201105651/http://www.nokia.com/games/downloads.html>.



Pet., 14, Nokia webpage, <https://web.archive.org/web/20021201105651/http://www.nokia.com/games/downloads.html>.

“9 More Lives” Game



Pet., 15, Nokia webpage, <https://web.archive.org/web/20021216204437/http://www.nokia.com/games/92xx/9ml>.

“Bounce” Game



Pet., 15, Nokia webpage,
<https://web.archive.org/web/20021216204039/http://www.nokia.com/games/92xx/bounce.html>. Likewise, Gameloft’s video game examples are also low-resolution single player arcade games that that do not require multiplayer communication with synchronized interaction across distributed servers. *See* Pet., 16.



Pet., 16, Gameloft webpage,

<https://web.archive.org/web/20021128014421/http://gameloft.com/> (archive page dating from 2002-11-28).



Pet., 16, Gameloft webpage,

<https://web.archive.org/web/20021128014421/http://gameloft.com/>. Likewise,

Mobiles' video game examples are also low-resolution single player arcade games that do not require multiplayer communication with synchronized interaction across distributed servers. *See* Pet., 18.

TENDANCE

Un best-seller à la sauce mobile

Puissance 4
Ce jeu est édité par Mobistation et se joue à deux par l'intermédiaire de SMS. Pour y accéder, il faut être client Orange et inviter un adversaire de son choix à jouer en tapant le nom du jeu : « X4 » suivi d'un espace et du numéro de téléphone de son adversaire au numéro suivant : 20555.
Vous trouverez plus d'informations sur le site www.orange.fr.

Les jeux par SMS

En attendant de pouvoir véritablement jouer en réseau, les opérateurs proposent de jouer par minimesage.

Battlemail
C'est la bataille !
Défiez l'un de vos amis. Première étape, entrez son numéro de téléphone, puis choisissez un personnage parmi les 5 proposés : son cri de victoire et ses gestes d'attaque et de défense qui lui permettront de battre son adversaire. Lorsque le défi est accepté, le combat peut commencer. Vous verrez alors se dérouler un film d'animation au cours duquel les 2 personnages s'affrontent. Ce jeu fonctionne sur Siemens C45, S45, ME45 et sur PC connecté à Internet.



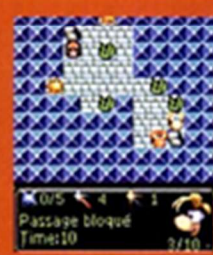


Rayman Bowling

Ce jeu compte 20 niveaux originaux et variés avec une multitude d'obstacles traversant la piste, des attaques ennemies et autres pièges en tout genre. Les fans du personnage retrouveront leur univers familier : la forêt des songes, le ciel chromatique, les montagnes bleues, la cité des images et les caves de skops.

Et la couleur fut

Nokia 9210, Ericsson T68, Trium Eclipse... Les téléphones à écran couleur commencent à faire leur apparition. Ils ouvrent de nouvelles perspectives ludiques. Ainsi Gameloft (Ludigames) a développé deux jeux Rayman pour le Trium Eclipse.



Rayman garden

Les Luma sont des boules de cristal cachées dans le jardin de Rayman. Celui-ci doit les retrouver en évitant les périls qui le guettent un peu partout : troncs, murs, feuilles, champignons toxiques, boules piquantes et piranhas.



Du sport sur Nokia

Le Finlandais n'est pas en reste... Sur le 9210, 8 jeux sont disponibles : Triple Pop, Bounce, Golf, 9 more lives, Virtually Board, Snowboarding, Snake Ex, Soccer et Card Deck.

Qu'est-ce que le téléchargement In-Fusio ?



In-Fusio édite des jeux interactifs sur téléphones mobiles depuis mars 2000. Ses premières applications étaient embarquées et distribuées par France Télécom Mobiles (aujourd'hui Orange) sous le nom Les Games. La société s'est ensuite tournée vers le téléchargement de jeux et a mis au point un moteur destiné à cet effet, baptisé ExEn, pour Execution Engine en septembre 2000. Basé sur le langage standard Java, ExEn est uniquement dédié au jeu. Implémenté dans les téléphones (Philips, Sagem, Siemens, Trium), ExEn est compatible avec tous les standards existants et à venir (GPRS, UMTS). Le téléchargement dure moins de 3 minutes, après lesquelles chaque joueur dispose d'un jeu « à vie » dans son téléphone. Il peut aussi participer à des concours et gagner des lots (scooters, lecteurs DVD, skateboards...).



In-Fusio propose une ludothèque à télécharger. Pour cela, Rendez-vous : www.orange.fr/espaceclients/divertir/games/

44 **mobiles** Février 2002

<https://books.google.com/books?id=ZFwEAAAAMBAJ&pg=PA44#v=onepage&q&f=false>. These game examples highlight the significant limitations of mobile phone hardware at the time, including constrained processing power, minimal graphics capabilities, and limited energy resources.

These limitations would make early 2000s mobile phones technically unsuitable for implementing a graphically intensive, multiplayer game like the “sniper” game. The “sniper” game requires complex systems for real-time multiplayer communication, collision detection across distributed servers, and extensive server-side message routing. *See* Ex. 1003, ¶¶ [0556]–[0558], [0570]–[0571]. These systems enable the display of multiple users’ Avatars, such as a “sniper” and a “bicyclist,” where the “bicyclist” is hosted on a different server from the “sniper” but may still be displayed on the “sniper” user’s Palm Pilot. *Id.*, ¶¶ [0556]–[0558]. These demands were far beyond the limited hardware and network capabilities of early mobile phones. A POSITA at the time would not have found such an implementation to be obvious.

This difference between the “monster” game and the “sniper” game was understood at the time by the Levine inventors themselves, who tailored each game to a different class of device based on those capabilities. The “sniper” game was run using a Palm Pilot, a device with more advanced capabilities, while the “monster” game, despite its playability on mobile devices, did not use the mobile phone to

display the game visuals to the user and instead used a messaging system to tell the user where the monster was. *See* Section V.B. This is further confirmed by the applicant’s decision not to include any screenshots or implementation examples of the “sniper” game on a mobile phone, nor to describe the game as playable from one. If mobile phones were a suitable platform for such gameplay, the Levine inventors would have said so.

B. The Monster Game Does Not Display The “Location-Based Video Game Character” (Claim 1[e]) Nor The “Second Video Game Character” (Claim 1[f]) On The Mobile Phone Display

Regarding the “monster game” embodiment, the Petition points to the “player’s character” as the “location-based video game character” (Pet., 45) and the “monster” as the “second video game character” (*Id.*, 48). Neither are displayed to the mobile user, and thus neither are displayed on “said display,” which is the mobile phone display.

The Petition concedes that in contrast with the “sniper” game, as to the “monster” game, Levine does not illustrate any characters being displayed on the display. *Id.*, 45. Rather, it argues that the mobile user would need to see his or her own character “to display the player’s character relative to the position of the displayed ‘monster’ so that the player could shoot and kill the monster or alternatively run away from the monster.” *Id.*, 45–46. But that is not how the “monster” game works. For the mobile user, the “monster” game is a message-based

game only. As explained above, the way the mobile user receives information is via messages, not visuals, about the game. Only “a user on a laptop client device 112e (‘laptop user’) would now ‘see’ the new ‘monster’ character on their laptop,” and the mobile user gets the information about the virtual character location via message from the laptop user. Ex. 1003, ¶ [0663]; *see also* ¶ [0664] (“In step 5812, the laptop user sends a message to a user on a mobile phone client device 112a (‘mobile user’). Such message, for example, would convey that ‘a new monster character is two blocks from you.’”). Then, the mobile user can “interact with monster character” by “pressing *9999 on their mobile phone client device 112a to kill the ‘monster’ character.” *Id.*, ¶ [0666]. And the user may “run away” from the monster that the user was told he or she is near by getting in a taxi and moving away. *Id.*, ¶ [0670]. None of this requires depiction of the user or the monster.

The Petition relies on Levine’s statements that “[g]rid system 100 ensures that the ‘monster’ character is properly rendered for each user utilizing a different type of client device 112” and “[i]n step 5818 [of Figure 58], the synthetic representation of the ‘monster’ character would disappear from the PC user’s, laptops user’s and mobile user’s client devices.” Pet., 50. But these are not visual depictions, they are rendering and representations that are consistent with how the monster game is played in the preceding paragraphs of Levine, *i.e.*, message-based renderings and representations, which is how Figure 58 describes them:

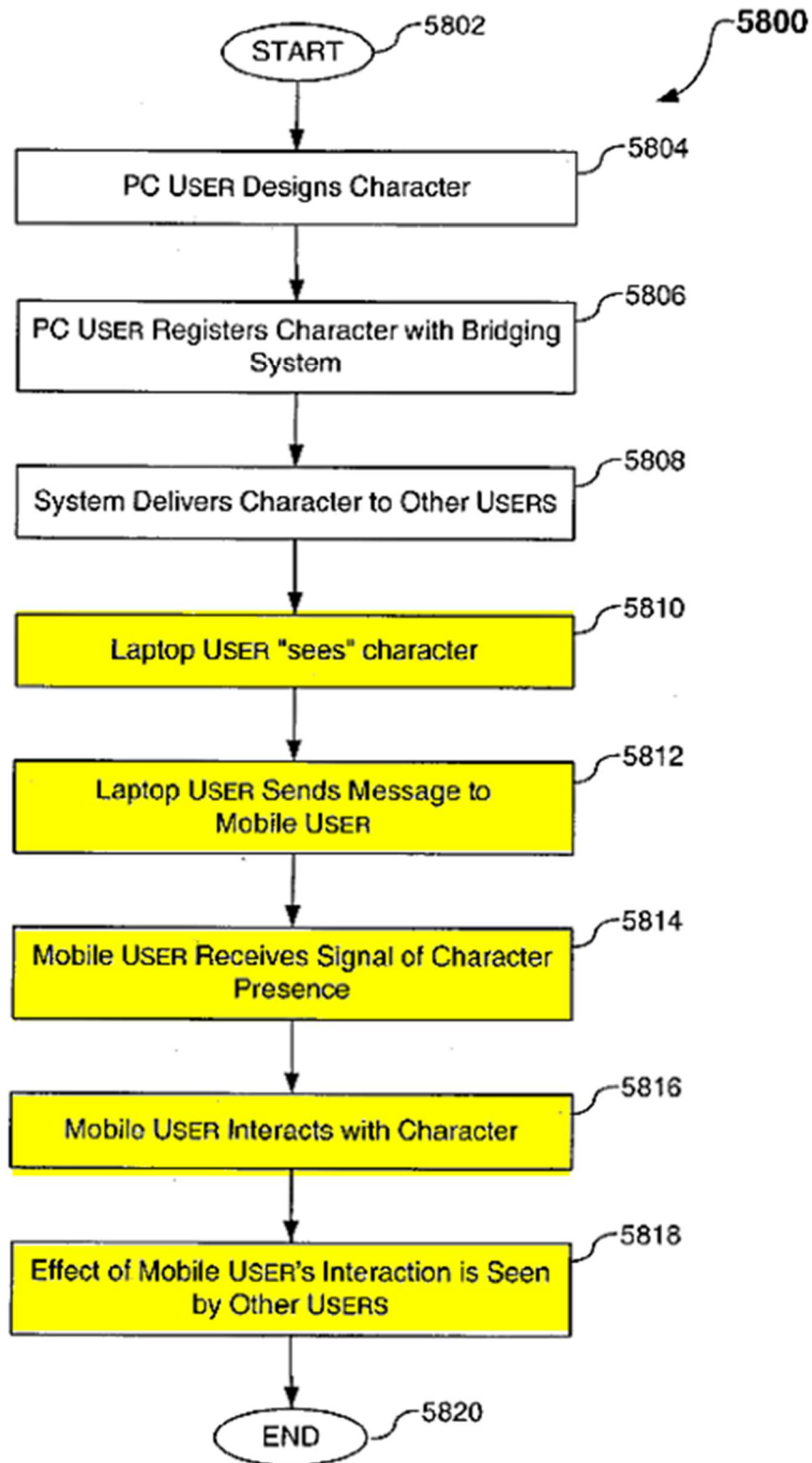


FIG. 58

Ex. 1003, Fig. 58 (annotated). The mobile user does not “see” any character. He or she receives a message and interacts with the character, as explained above, by pressing buttons on his or her mobile phone.

Nor is there any evidence that in the monster game, any other non-playable character is depicted on the mobile user’s screen, including the dog, which is neither a part of the monster game, nor described as being displayed. Pet., 50–52.

And as explained above in Section V.A, it is not an obvious modification to simply display the game characters on the mobile user’s screen, given the technological limitations at the time. This is precisely why the Levine inventors designed the mobile user to play a message-based game instead.

C. The Sniper Game Does Not Disclose Or Render Obvious “A Manual Control Is Operable To Cause Said Location-Based Video Game Character To Perform An Action”

As explained above in Section V.A, the sniper game is not played on a mobile phone and would not be. The sniper game also lacks “a manual control is operable to cause said location-based video game character to perform an action.” The Petition alludes to a manual control operable to shoot the gun in the sniper game. Pet., 41. However, the Petition admits that Levine does not “explicitly describe a manual control of the player causing the ‘sniper’ to shoot the sniper’s gun.” *Id.*, 41. Instead the Petition speculates that it would have been obvious for a user to manually

control the “sniper” (e.g., to shoot) by analogy to the “monster” game. *See id.*, 41–42.

That is incorrect because there is already another method of having the sniper shoot in the game; the characters move and the system causes the sniper to shoot. Levine makes clear that the sniper’s interactions with other characters such as the “victim” or “courier” are governed by a region-of-interest and region-of-presence model managed by the game servers. *See* Ex. 1003, ¶¶ [0556]–[0558], [0569]–[0573]. This system routes data packets and takes actions based on proximity and visibility rules; for example, when the courier enters the sniper’s region of presence, collision packets are sent; when the victim is “in range,” the “sniper” receives updates about the victim. *See id.*, ¶¶ [0557], [0571]–[0572]. These updates are passive; there is no disclosure that the sniper user issues a manual input to cause any actions such as shooting. Instead, the sniper’s functionality is governed by automated, server-side logic based on location, state synchronization, and packet routing. For instance, Levine explains that messages about the courier or victim are routed to the “sniper” “as long as” those characters are in certain spatial relations to the “sniper.” *Id.*, ¶ [0572].

A POSITA reading Levine’s “sniper” game would not find it obvious to include buttons to manually press for shooting based on the passive automated manner in which updates are sent. *See id.*, ¶¶ [0556]–[0558], [0569]–[0573].

Rather, given that Levine describes a system where actions (such as collisions or visibility events) are triggered automatically based on characters' proximity or presence within defined spatial regions, a POSITA would have reasonably understood that the sniper's interactions would similarly be automated. That is, when the victim is in the proper area, the sniper shoots automatically. For example, Levine describes how packet messages such as "ACTIVATE :: THING_HERE" or "ACTIVATE :: THING_DROP" are sent by the server as characters move in and out of range, and how the sniper's client simply receives these updates via routing logic. *Id.*, ¶ [0572]. This architecture at best shows system-controlled behavior, not user-initiated shooting action.

The Petition argues that Levine describing that "the sniper may have a rifle scope," would render obvious "a manual control for the player to cause the 'sniper' to shoot." Pet., 41. But that quotation is talking about the different "area of interest" for each user: "Note that the victim and the courier each have their own area-of-interest, whose shape and extent may differ from that of the sniper (the victim may be nearsighted, while the Sniper may have a rifle scope)." Ex. 1003, ¶ [0573]. Being "in range" based on areas of interest in Levine simply determines whether updates are routed to the "sniper" client. *Id.*, ¶ [0572]. The "in range" condition supports the view that actions are triggered by proximity, not by manual input such as the ability to pull the trigger, which is lacking in Levine's sniper game. Neither do

Levine's descriptions where "PROPERTY_VECTOR state could represent the direction in which a game character's gun is pointed," nor a description of one of the characters as a "victim." Pet., 41–42. The sniper character must have some attribute regarding where a virtual gun is pointed in order for it to be a sniper game. That does not mean the user can pull the trigger. And again, the fact that a user can control the sniper is not the issue: the user can move the sniper as discussed above, but that does not mean he or she can pull the trigger. If he or she could, Levine would have said so somewhere in its 700-plus paragraph specification.

VI. Conclusion

For the above-described reasons, Patent Owner respectfully requests that the Board deny institution.

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Respectfully submitted,

/Peter F. Snell/

Peter F. Snell (Reg. No. 52,235)
Brad M. Scheller (Reg. No. 61,022)
MINTZ, LEVIN, COHN, FERRIS,
GLOVSKY AND POPEO, P.C.
919 Third Avenue
New York, New York 10022
Telephone: 212-935-3000
Facsimile: 212-983-3115
E-mails: PFSnell@mintz.com;
BMScheller@mintz.com

Reza Dokhanchy (Reg. No. 62,795)
MINTZ, LEVIN, COHN, FERRIS,
GLOVSKY AND POPEO, P.C.
3580 Carmel Mountain Rd Suite 300,
San Diego, CA 92130
Telephone: 858-314-1596
Facsimile: 858-314-1501
E-mail: RDokhanchy@mintz.com

CERTIFICATE OF WORD COUNT

The undersigned certifies that the portions of the above-captioned PATENT OWNER'S PRELIMINARY RESPONSE specified in 37 C.F.R. § 42.24 have 4,711 words, in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24(b)(1). This word count was prepared by the word-processing program used to prepare this paper (Microsoft Word).

Dated: August 7, 2025

/Peter F. Snell/

Peter F. Snell (Reg. No. 52,235)

CERTIFICATE OF SERVICE

I certify that a copy of this Patent Owner's Preliminary Response is being served by electronic mail on the following counsel of record:

Lead Counsel

Heidi L. Keefe
(Reg. No. 40,673)
COOLEY LLP
1299 Pennsylvania Ave. NW,
Suite 700
Washington, DC 20004
Telephone: (650) 843-5001
Facsimile: (650) 849-7400
hkeefe@cooley.com

Backup Counsel

Phillip E. Morton
(Reg. No. 57,835)
pmorton@cooley.com
Andrew C. Mace
(Reg. No. 63,342)
amace@cooley.com
Mark R. Weinstein (Admission *pro hac vice* to be requested)
mweinstein@cooley.com
Lowell D. Mead (Admission *pro hac vice* to be requested)
lmead@cooley.com
Patrick Lauppe (Admission *pro hac vice* to be requested)
plauppe@cooley.com
COOLEY LLP
ATTN: PATENT GROUP
1299 Pennsylvania Ave. NW,
Suite 700
Washington, DC 20004
Telephone: (650) 843-5001
Facsimile: (650) 849-7400

Dated: August 7, 2025

/Peter F. Snell/

Peter F. Snell (Reg. No. 52,235)