

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PLR WORLDWIDE SALES LIMITED,
Petitioner

v.

FLIP PHONE GAMES INC.
Patent Owner

U.S. Patent No. 8,688,089
Inter Partes Review No. 2024-00133

SUPPLEMENTAL DECLARATION OF JOSÉ ZAGAL, PH.D.

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	UNDERSTANDING OF THE RELEVANT LEGAL STANDARDS.....	1
	A. Claim Construction.....	2
	1. Printed Matter Doctrine	2
	2. Claim Terms Based on Subjective Views.....	2
III.	CLAIM CONSTRUCTION OF “NON-PROMOTIONAL BACKGROUND OBJECT”	2
	A. Procedural History.....	2
	B. “Non-Promotional” and “Background” Describe Content	3
	C. The Board’s Preliminary Construction of “Background” Describes Subjective Characteristics	7
	D. The Prosecution History Provides an Objective Way to Interpret “Background”	14
IV.	HO, JIAU, AND STURMAN DISCLOSE “BACKGROUND” OBJECTS UNDER THE BOARD’S PRELIMINARY CONSTRUCTION.....	15
	A. Ho	15
	B. Jiau.....	17
	C. Sturman.....	18

I, José P. Zagal, Ph.D., declare as follows:

I. INTRODUCTION

1. I have been retained by Quinn Emanuel Urquhart & Sullivan on behalf of PLR Worldwide Sales Ltd. (“Playrix” or “Petitioner”) in connection with the *inter partes* review (“IPR”) of U.S. Patent No. 8,688,089 (the “’089 Patent”) (Ex. 1001) before the Patent Trial and Appeal Board (“PTAB” or “Board”). I understand the ’089 Patent is assigned to Patent Owner Flip Phone Games, Inc. (“Patent Owner”).

2. I have been asked to supplement my November 7, 2023 declaration to provide my opinions regarding the Board’s preliminary construction of “non-promotional background object” in its Institution Decision, including whether the prior art discloses “non-promotional background objects” under the Board’s preliminary construction.

3. My background, qualifications, and compensation are described in my November 7, 2023 declaration prepared for this proceeding and are incorporated herein by reference.

4. All the opinions set forth in this declaration are my own.

II. UNDERSTANDING OF THE RELEVANT LEGAL STANDARDS

5. I incorporate the “Understanding of the Relevant Legal Standards” section from my November 7, 2023 declaration.

A. Claim Construction

1. Printed Matter Doctrine

6. I have been informed that under the printed matter doctrine, claim limitations directed to the content of information and lacking a requisite functional relationship are not entitled to patentable weight, meaning that they need not be considered in determining whether the claims are disclosed by the prior art. I have been informed that the printed matter doctrine is not limited to text, and can also apply to visual content, such as markings on the face of a die.

2. Claim Terms Based on Subjective Views

7. I have been informed that a claim term cannot be construed in a manner that depends on the subjective views of a user or operator.

III. CLAIM CONSTRUCTION OF “NON-PROMOTIONAL BACKGROUND OBJECT”

A. Procedural History

8. I have been informed that the Board originally denied institution of the Petition based on its interpretation of the term “non-promotional background object” to require a “background” object to be “outside the primary focus of game play and as unexpectedly interactive components.” Decision Denying Institution at 21-22.

9. I have been informed that Petitioner filed a request for director review of the denial of institution. I have been informed that the Director vacated the decision denying institution and remanded the Petition to the Board. I have been

informed that the Director determined that the Board's construction of "non-promotional background object" was improper because it was based on the subjective views of the user. I have been informed that the Director also concluded that what a user would expect to be "unexpectedly interactive" was improperly based on the subjective perspective of a user. Remand Decision at 6-8.

10. I understand that on remand, the Board construed the term "non-promotional background object" to mean "an object that is not in the foreground and does not display a promotional message unless a hot spot is activated." Institution Decision at 18. I understand that Board also asked the parties to address whether the term "non-promotional background object" or any portion of that term should be given patentable weight. *Id.* at 19.

B. "Non-Promotional" and "Background" Describe Content

11. I have been asked to opine on whether a POSITA would understand the terms "non-promotional" and "background" to refer to informational content, or to functional or structural elements of the claim. In my opinion, both terms as they are used in the context of the '089 Patent describe content, not function or structure. I understand that under the printed matter doctrine, this means both limitations are not entitled to patentable weight.

12. In my opinion, a POSITA would understand, in the context of the '089 Patent, that the terms "promotional" and "non-promotional" are used to refer to the

content of information in a game—specifically, whether that content communicates information of a promotional nature (such as an advertisement) or non-promotional nature (such as game mechanics, plot, or dialogue) to the user. The '089 Patent does not describe anything functionally or structurally different in the implementation of promotional and non-promotional objects—the only apparent difference is in their content.

13. Similarly, a POSITA would understand, in the context of the '089 Patent, that the term “background” refers to the visual content of the game, such as where an object is perceived to be located relative to other objects in the game world. Like the term “non-promotional,” the specification does not describe any functional or structural differences between background objects and other objects in the game world. For example, there is no description of any code or programming that is used to implement or render background objects, but not other types of objects. Similarly, there is no description of any unique or different code or structures for implementing hot spots assigned to background objects, as opposed to hot spots assigned to non-background objects.

14. In fact, the opposite is true: the specification suggests that the same process can be used to define and assign a hot spot to *any* object, whether the object is promotional or non-promotional, or in the background or foreground of a scene. For example, the specification explains that any hot spot “may be provided by

designating a location in-game for activating the hot spot, detecting activation of the hot spot during operation of the mobile video game, and displaying content when the hot spot is activated.” Ex. 1001, 6:55-61. The specification does not make any distinction between hot spots for promotional objects and non-promotional objects, or for background objects or foreground objects. A POSITA would understand that in the ’089 Patent, the hot spot functionality is the same regardless of the content of the object the hot spot is assigned to.

15. The examples in the ’089 Patent’s specification also confirm the understanding that “non-promotional” and “background” describe the content of objects and not functionality or structure. For example, Figure 2A of the patent shows an example of a darts video game that includes a chalk board 220 that may include a hot spot that can be activated to display a promotional message. Ex. 1001, 6:46-54, Fig. 2A.

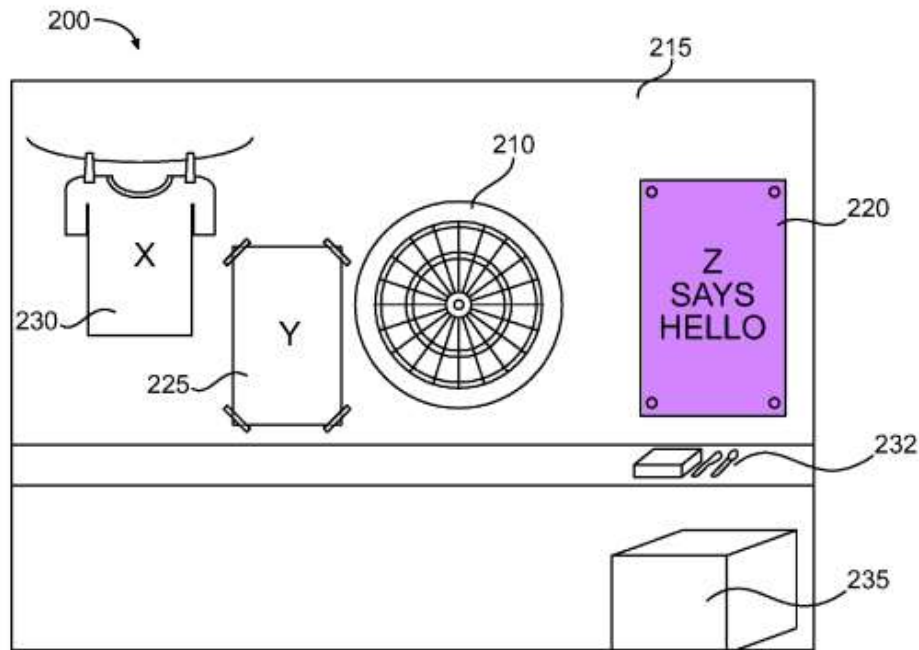


FIG. 2A

16. Although the specification does not describe the chalk board as “non-promotional” or “background,” during prosecution, the applicant described the chalk board before it is activated (*i.e.*, when it is “blank”) as a “non-promotional object” that is “depicted in the background of the gaming environment.” Ex. 1002 at 122. But the specification does not describe anything about the *functionality* of the chalk board that would make it “non-promotional” or a “background” object. The only apparent reasoning for the chalk board being “non-promotional” in its blank state is that it lacks any promotional content because it is not displaying an advertisement. Similarly, the only apparent reasoning for the chalk board being a

“background” object is because it appears to be part of the décor of the scene, not because it is functionally or structurally different from any other game element.

17. Because the terms “non-promotional” and “background” describe content that is not tied to structure or functionality based on the specification of the ’089 Patent, I understand that both terms should not be given patentable weight under the printed matter doctrine.

C. The Board’s Preliminary Construction of “Background” Describes Subjective Characteristics

18. I understand that in its Institution Decision, the Board preliminarily construed the term “non-promotional background object” to mean “an object that is not in the foreground and does not display a promotional message unless a hot spot is activated.” Institution Decision at 18. In my opinion, the Board’s construction of the term “background” to mean “not in the foreground” adds a subjective element to the claim term because the ’089 Patent does not describe any way to determine whether an object is in the “foreground” or “background” of a scene other than the subjective perception of a user.

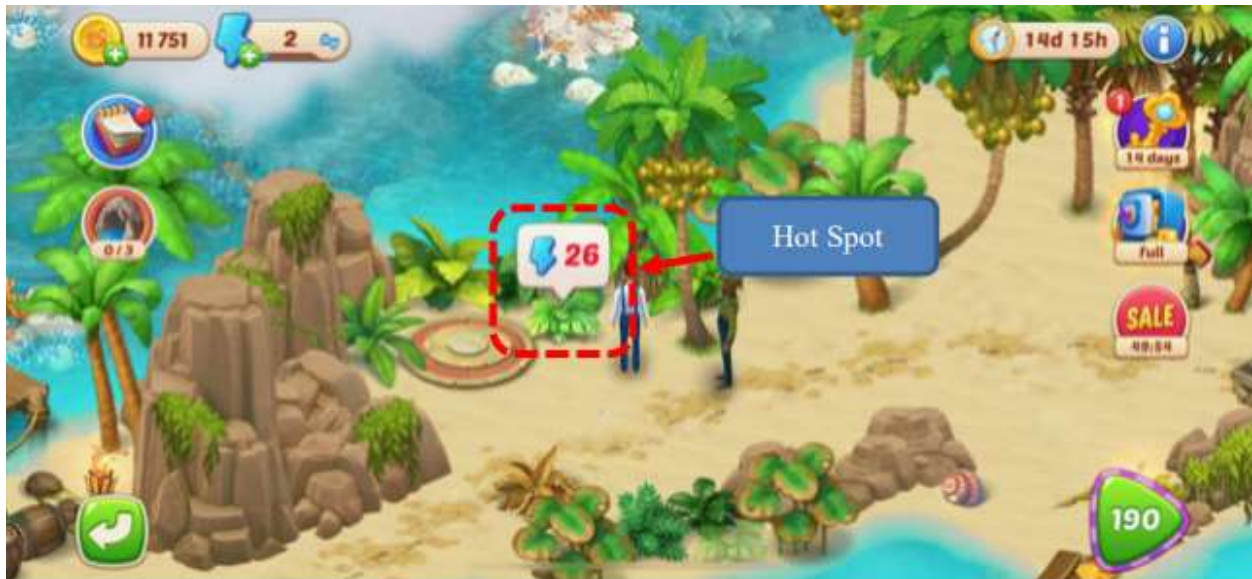
19. Particularly in the context of video games, whether an object is considered to be in the “foreground” or “background” of the player’s field of view may depend on the perception or experience of the particular player, and will often depend on the player’s location or circumstances in the game. For example, a

player that is aware that a particular object in the scene is important to advancing the game may consider that object to be part of the foreground, even if it is at a distance from the player's character. Meanwhile, a player who does not yet know that the object is important to advancing the game may believe that the object is part of the background.

20. Similarly, because many games allow players to move about the game world, whether an object is in the background or foreground of a scene may depend on the player's position, and may change over time. For example, in games where the player is allowed to explore a game world, objects will be displayed at different distances from the player and the player's character as the player moves through the world. When the player is at one location in the game world, an object may appear to be in the background; as the player moves in the direction of the object, however, it may be drawn closer to the screen and appear to be in the foreground. In these types of games, it may not be possible to define most objects as "background" objects or "foreground" objects because at different points in time, relative to the position and perspective of the player, the same object may be either in the foreground or the background of a scene. Even if the game provides a fixed perspective that does not change, it may be ambiguous whether most objects should be classified as "foreground" or "background" objects. The object closest to the player may be considered in the foreground, and

the object furthest from the player may be considered in the background, but classifying every object in between is a subjective exercise that depends on the player's perception.

21. Other games, in particular games that don't provide a fully three-dimensional view of the game world, may lack the sense of depth that is necessary to view objects as part of the foreground or background of a scene. For example, I understand the image below was provided in Patent Owner's infringement contentions in the district court case involving the '089 Patent:



22. The scene above may often be described as a “2.5D” perspective. The player character can only move along a two-dimensional plane, even though objects are displayed in three dimensions. From this perspective, it may be difficult to categorize objects as “foreground” or “background” because there is little depth visible from the player's field of view. Objects are not rendered to

appear closer or farther from the player as the character moves through the game world—only their position on the map changes. Thus, whether or not a particular object on the map is considered to be part of the “foreground” or “background” will depend on the subjective perception of the player. Consider for example the element indicated by the red dotted line in the image above consisting of a “text bubble” with a blue lightning icon and the number 26 in red. The small triangular bulge at the bottom of the bubble indicates perhaps that this text bubble exists above the plant it seems to be pointing at. Is this background or foreground? The plants immediately at the bottom of the scene are perhaps the foreground and the water along the top is in the background. But also, the text bubble is an interface element so perhaps it is not in the scene at all, rather it floats on top, like the other interface elements that do not exist in the world like the “Sale” button on the right, the notepad on the left, and many more. And even if objects could be objectively classified as in the foreground or background, the position of those objects will change as the player moves—meaning that the objects themselves are not inherently part of the foreground or background.

23. The specification and prosecution history of the '089 patent also demonstrate the whether an object is part of the foreground or background of a scene is based on the user's subjective perception. For example, the '089 Patent

explains that Figures 2A and 2B show scenes from a darts game, which includes objects that may have associated hot spots (highlighted in purple below).

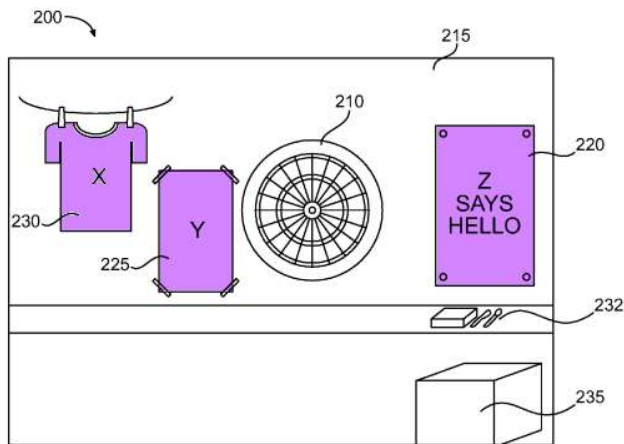


FIG. 2A

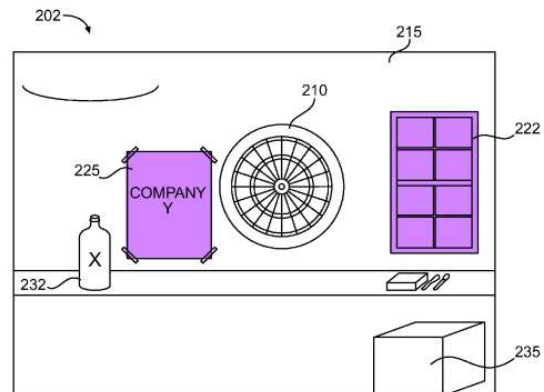


FIG. 2B

Ex. 1001, 6:36-54, 7:12-24, Figs. 2A, 2B. Many of these objects are all positioned on a virtual wall in the player's field of view, and thus at roughly the same distance from the player, such as the t-shirt, poster, and chalk board in Figure 2A, and the poster and window in Figure 2B.

24. Based on the applicant's arguments during prosecution, the dart board 210 in both images would be considered part of the foreground of the game because that is the primary gameplay element of a darts game. Specifically, during prosecution, the applicant argued that background objects are distinct from objects that are "featured in the forefront of game play as [a] primary object[]" to be manipulated or used during game play." Ex. 1002, 85. The dart board here would thus not be a background object.

25. But by that same logic, none of the other objects in these scenes should be background objects—because they are all are roughly the same distance as the dart board (because all of them appear to be affixed to the same wall). Yet during prosecution, the applicant described the chalk board 220 as being “in the background of the gaming environment.” Ex. 1002, 122. Because the chalk board and the dartboard are both depicted on the same wall, it cannot be an objective characteristic of the position or appearance of the chalk board that would cause it to be a background object. Thus, the only apparent reason why the chalk board would be considered part of the “background” is because of a player’s subjective perception that it is not important to or intended to be part of the game play. This is purely subjective, because a player who knows that the chalk board has a hot spot that can be activated might perceive the same chalk board as part of the foreground of the scene.

26. Other statements in the prosecution history also show that the ’089 Patent does not use the term “background” to refer to the position of an object relative to other objects in the scene. For example, the applicant stated that the specification describes “background” objects because it discloses “a ‘hidden’ area’ within a game” where “hidden features may be placed ... so that the user has something new to look at or trigger (sometimes unexpectedly).” Ex. 1002, 83-84 (quoting Ex. 1001, 4:17-31). But whether an object may be triggered

“unexpectedly” has nothing to do with its relative position in the scene, and is entirely dependent on the player’s subjective expectation.

27. Similarly, during prosecution, the applicant argued that “pit stop” and “treasure chest” objects in the Chu reference were not “background” objects because “they are featured in the forefront of game play as primary objects to be manipulated or used during game play.” Ex. 1002, 85. But this statement cannot be based on where Chu’s “pit stop” and “treasure chest” are shown in a scene, because Chu does not include any figure that illustrates a “pit stop” or a “treasure chest,” nor does Chu state where specifically in any particular scene the pit stop or treasure chest are located. Ex. 1021, ¶¶63-65. Chu certainly does not say that the pit stop or the treasure chest are in the “foreground.” But Chu does show a number of objects that, based on their location in the scene, would be considered part of the background because they are at a distance from the player. For example, in the scene below, the billboard is shown in the background of the scene, at the far end of a road or path that extends into the distance into the background. Ex. 1021, Fig. 2, ¶¶38-39:

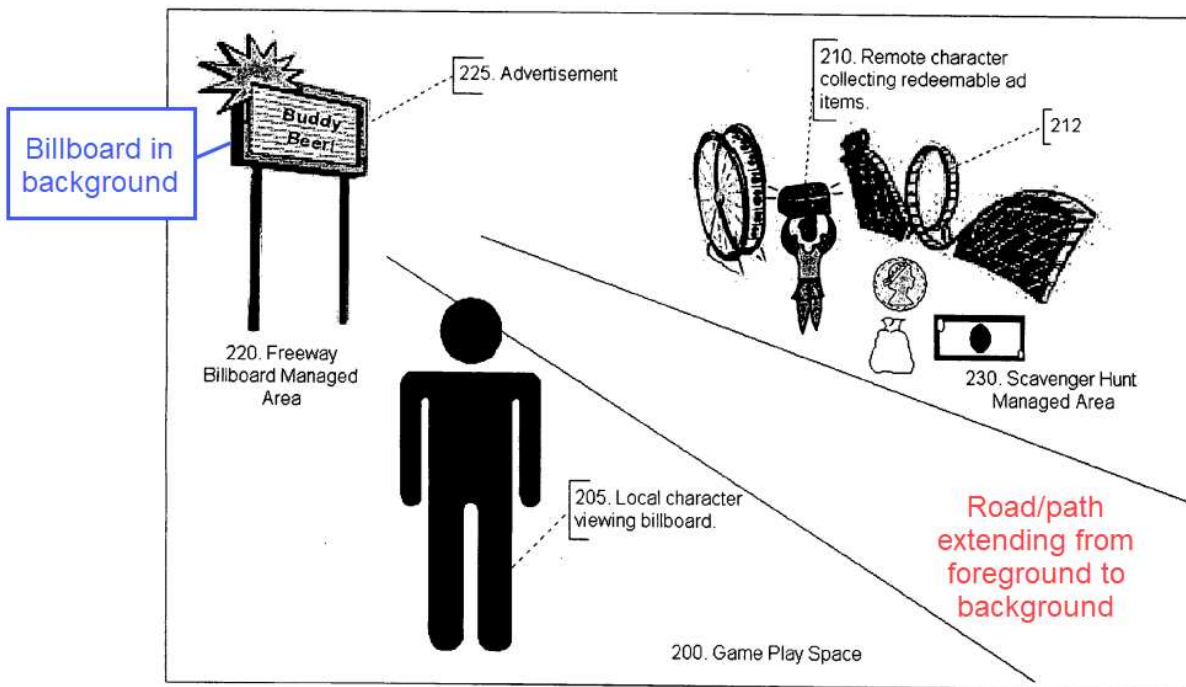


Fig. 2

D. The Prosecution History Provides an Objective Way to Interpret “Background”

28. As I explained in my first declaration, the prosecution history provides a description of what constitutes a “background” object that is based on its functionality and can be determined objectively. Specifically, during prosecution, the applicant distinguished Chu’s objects based on their in-game functionality, and specifically, whether they are objects that “are not themselves needed or required in order to play the game.” Ex. 1002, 85-86. According to the applicant, such objects that are not “needed or required in order to play the game” are background objects. This functional definition is objective because it can be determined, based on the gameplay rules or the game code, whether a particular

object ***needs*** to be interacted with in order to play the game or to advance gameplay, or whether interacting with an object is entirely optional and not necessary in order to play or advance the game.

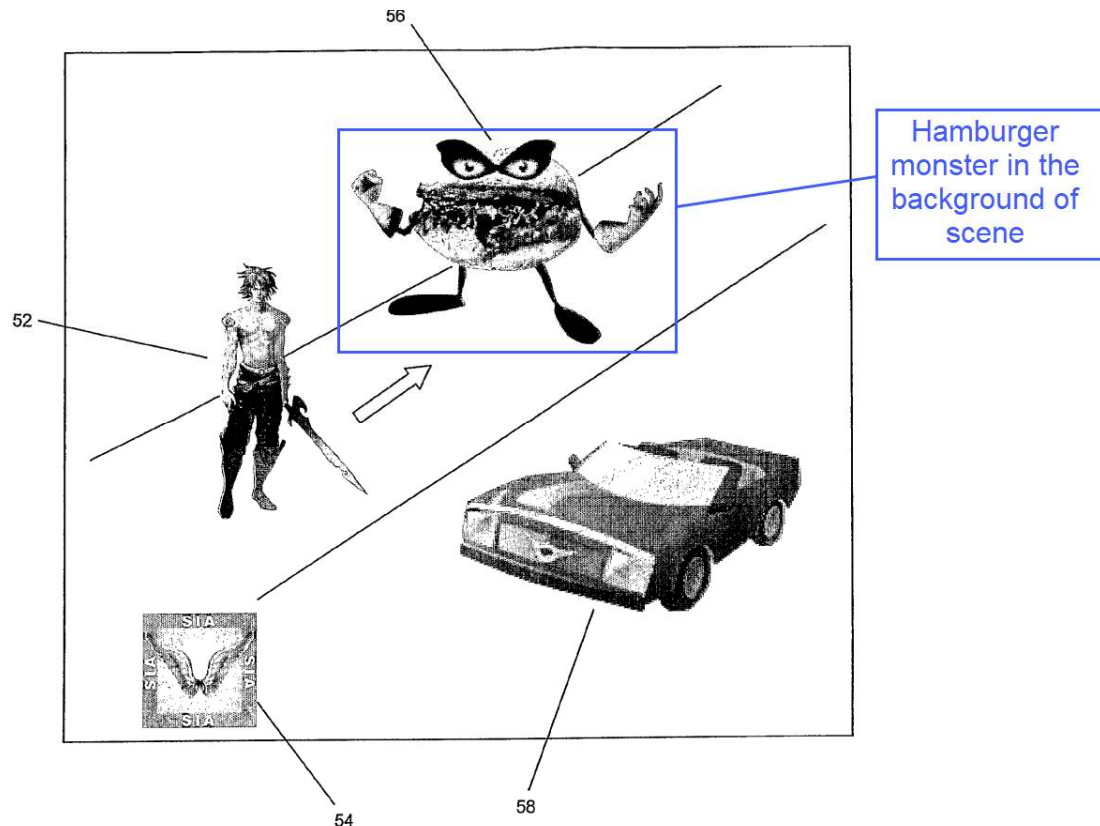
29. As I explained in my first declaration, Ho, Jiau, and Sturman all disclose “background” objects under this construction because they disclose objects with hot spots that are optional elements of the game, such as optional monsters and interactive signs and billboards.

IV. HO, JIAU, AND STURMAN DISCLOSE “BACKGROUND” OBJECTS UNDER THE BOARD’S PRELIMINARY CONSTRUCTION

30. Even under the Board’s preliminary construction, in my opinion, Ho, Jiau, and Sturman all disclose “background” objects with hot spots.

A. Ho

31. Figure 3 of Ho shows a “hamburger monster” (56). As illustrated in Figure 3, the hamburger monster is in the background of the scene because it is at a distance from the player (*i.e.*, “further down the path” as indicated by the parallel lines and the arrow), particularly in relation to other objects in the scene (such as wings 54, car 58, and player character 52). EX1004, Fig. 3, 4:1-16.



32. Ho also explains that “the hamburger monster 56 may be engaged only when the character 52 fights and successfully slays the hamburger monster 56.” Ex. 1004, 5:9-10. Figure 3 also shows an arrow that would indicate to a POSITA that in order to engage with the hamburger monster, the player character 52 must travel down the pathway (indicated by the parallel lines) in the direction of the arrow. A POSITA would understand that in a 3D game where the player moves through the game world, the hamburger monster would initially be seen in the background, and would only appear to move closer to the player as the player character travels down the pathway toward the hamburger monster.

B. Jiau

33. Figure 11(d) of Jiau shows two objects: an object 320 with “a pop-up advertisement 1182 that is activated when the user’s location becomes within a predetermined virtual distance in the virtual world,” and a “static object 1184” that “is always visible when it comes into view.” Ex. 1005, 15:3-17. Figure 11(d) depicts object 320 in the background of the scene relative to static object 1184, as is evident from the grid that shows the depth of each object. Ex. 1005, Fig. 11(d). Specifically, as illustrated below, the grid shows that static object 1184 is closer to the user than object 320.

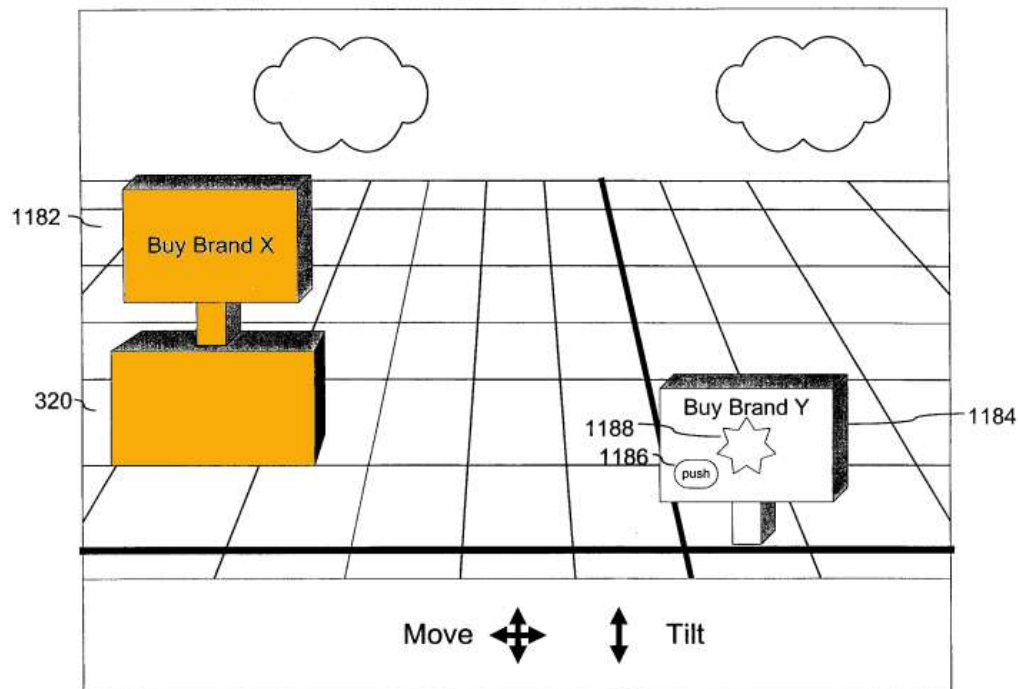


Fig. 11(d)

34. In addition, because Jiau's game is a virtual world, a POSITA would understand that the player moves through the world, and the relative positions of objects would shift with the player's movement. Thus, before the player reaches the position in the game shown in Figure 11(d), object 320 would be even further in the distance (*i.e.*, even more in the background). Note how possible movement in Jiau's virtual world is communicated in Figure 11(d) via the words Move and Tilt with accompanying arrows showing the possibilities afforded in the example.

C. Sturman

35. As I explained in my first declaration, Sturman discloses a number of different objects that would conventionally be considered to be part of the background of a scene, including storefront signs, jumbotron screens, and posters on walls. Ex. 1006, ¶19. Although Sturman does not expressly describe these as "background objects," a POSITA would understand that objects such as signs, posters, and jumbotron screens are designed to be visible from a distance, and would typically, at least initially, appear in the background of a scene.

Date: May 19, 2025

Respectfully Submitted,

A handwritten signature in dark ink, consisting of stylized, overlapping loops and strokes, positioned above a horizontal line.

Dr. José Zagal