

Filed: March 27, 2026

Filed on behalf of Activision Blizzard, Inc.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACTIVISION BLIZZARD, INC.,
Petitioner

v.

MILESTONE ENTERTAINMENT, LLC,
Patent Owner

Case No. IPR2025-00709
U.S. Patent No. 10,650,635

**PETITIONER'S REPLY TO
PATENT OWNER'S RESPONSE**

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1025	Elizabeth Kolbert, <i>Pimps and Dragons: How an online world survived a social breakdown</i> 88 (May 28, 2001)

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1026	U.S. Patent App. Pub. No. 2003/0114220 to ("McClintic")

I. INTRODUCTION

The Challenged Claims of the '635 Patent—namely, claims 1, 2, 4, 6, 8-10, 14-18, 21-23, 25, 27, and 29—should not have issued.

To that point, PO ***does not*** dispute that all Challenged Claims (with the exception of dependent claim 9) are obvious over Schneier143 alone or in view of Okita. But the reality is that PO could not credibly raise such a dispute. The use of virtual currency in electronic games as recited in the Challenged Claims has been known for decades, and as PO effectively admits, the Petition more than meets the burden to show that all the Challenged Claims are unpatentable. Consequently, there is no question that the Board should cancel these Challenged Claims.

Indeed, the Board need only decide a single issue—whether Schneier143 discloses the additional limitation of dependent claim 9 which recites that the “multiplier” (“conversion of the virtual money”) “is variable over time.” EX1001, cls. 1 and 9. And the answer is simple: Schneier143 does disclose this limitation. Specifically, the Petition establishes that, in one example, Schneier143 discloses “[t]he number of credits that a player receives per dollar may also be ***variable***” and that “[t]he price per game...can be manipulated with codes from the central computer 12 to ***alter or change the pricing structure*** for particular games via the ***Updating Cost Information protocol***.” EX1008, 63:31-34, 63:45-52 (emphasis added); *see also* Pet., 31-32. By updating the multiplier using this protocol, the

multiplier is necessarily variable over time. *See* EX2004, 181:20-182:6 (“That’s the process it’s describing, updating the cost and information in variable timing. That is updating the variable—updating the metered value, which is your transfer, your multiplier, essentially, for over time...And it’s described very clearly there and in greater detail in the description of figure 19”).

PO essentially complains that Schneier143’s disclosures do not use the word “time.” POR, 6-8. But a POSITA (or anyone with common sense) would understand that updating—changing from old to new—requires the passage of time. PO’s argument is devoid of merit, and dependent claim 9 should also be found unpatentable.

II. GROUNDS 1 AND 2: PO CANNOT OVERCOME OBVIOUSNESS BASED ON SCHNEIER143 ALONE OR IN VIEW OF OKITA

A. PO does not dispute that Schneier143 alone or in view of Okita renders obvious claims 1, 2, 4, 6, 8, 10, 14-18, 21-23, 25, 27, and 29

In its response, PO does not dispute Petitioner’s challenges to any of the Challenged Claims beyond dependent claim 9. Accordingly, PO has waived all arguments regarding the unpatentability of claims 1, 2, 4, 6, 8, 10, 14-18, 21-23, 25, 27, and 29. *See In re NuVasive, Inc.* 842 F.3d 1376, 1381 (Fed. Cir. 2016) (“[A]ny arguments for patentability not raised and fully briefed in [] [PO’s] response will be deemed waived”); *see also* Paper 14 (Scheduling Order), at 10 (“Patent Owner is cautioned that any arguments not raised in the response may be deemed waived.”).

B. Schneier143 renders obvious “wherein the multiplier is variable over time” of dependent claim 9

1. The Petition establishes that Schneier143 renders obvious “wherein the multiplier is variable over time”

The Petition details that Schneier143, like the '635 Patent, discloses that the monetary value of virtual currency in a game (e.g., credits in Schneier143) can be subject to a “multiplier.” *See* Pet., 21-22; EX1008, 63:31-34 (“[a] purchase of ten credits may cost \$0.50 each while a purchase of twenty credits may cost \$0.30 each”); *see also* EX1001, 14:15-17 (“[a] vCoin will typically be a multiplier times the corresponding numeric monetary value, e.g. one dollar equals 500 vCoins”). PO does not dispute that Schneier143 discloses a “multiplier.” *See generally* POR.

The Petition further describes how Schneier143 discloses that this “multiplier” may vary over time, for example, by varying the rates at different points of play, using an “Updating Cost Information protocol” to change the price per game credit, or varying the rates depending on the time or day of play. *See* Pet., 31 (“Schneier143 discloses that “[t]he number of credits that a player receives *per dollar* may also be *variable*”) (citing EX1008, 63:31-34), 31 (“Schneier143 explains that: As described above, the meter 502 can determine the price per game credit from the data or instructions associated with Software Control Block 706 of the game program 26. The price per game may be stored within the meter’s 502 non-volatile memory and can be manipulated with codes from the central computer 12 *to alter or*

change the pricing structure for particular games via the Updating Cost Information protocol described above”) (citing EX1008, 63:45-52), 32 (“the multiplier can change based on time” as it “may be reduced during a period of high demand, while also increased during a period of low demand”); *see also* EX1008, 62:48-50 (“Rates for enabling play can be varied depending upon the time or day of play as well.”).

2. PO's arguments against Schneier143's disclosures of “the multiplier is variable over time” lack merit

PO argues that Schneier143 does not disclose “variable over time” because the disclosures do not teach how the multiplier can “vary the value of virtual currencies across different time periods.” *See* POR, 6-7, 5-8. As discussed further below, PO's conclusory arguments are erroneous.

a. The '635 Patent does not limit the phrase “the multiplier is variable over time”

To begin, the '635 Patent gives no definition for “variable over time,” which is found only in dependent claim 9. And claim 9 provides no further clarity, reciting only a “system for effecting user experience in a multi-level electronic game environment of claim 1 wherein the multiplier is variable over time.” EX1001, cl. 9. Regarding the term “multiplier,” the '635 Patent solely discloses that “[t]he multiplier may be fixed over time and over games, or it may vary based on factors such as time, game or player status. For example, *play during certain times may*

result in ‘double vCoins.’” EX1001, 14:19-22 (emphasis added). Thus, in one embodiment, a multiplier that varies “based on ... time” could, for instance, include ‘vCoins’ having a particular value at one time that then doubles at another point in time during game play. *Id.* But neither the foregoing embodiment, nor the ’635 Patent places any limitation on the term. Importantly, the language recites “variable over time,” not “variable based on time.”

b. Schneier143 discloses a “multiplier is variable over time” when it states “[t]he number of credits that a player receives per dollar may also be variable”

Schneier143 expressly discloses that “[t]he number of credits that a player receives per dollar may also be variable.” *See* Pet., 31 (citing EX1008, 63:31-34). Schneier143 goes on to identify different ways that the multiplier can vary, including, among others, “[a] purchase of ten credits may cost \$0.50 each while a purchase of twenty credits may cost \$0.30 each,” “[c]redit discounts can be offered to select players who have obtained certain certified titles,” and notably, using the “Updating Cost Information protocol” to change meter 502 which determines price per game credit. EX1008, 63:33-52.

PO takes an overly narrow view of this teaching by limiting Schneier143’s broad disclosure that credits per dollar may be variable to the specific example that immediately follows (varying based on purchase volume) and arguing that a “multiplier [that] is different, at one point in time, depending on the number of

credits purchased” “provides no disclosure that the multiplier in this pricing may vary over time.” POR, 6. But Schneier143's disclosure is not so limited. Indeed, it mirrors the statement in the '635 Patent that the multiplier “may vary based on factors such as time, game or player status.” EX1001, 14:19-21. Schneier143 goes on to teach that “[a]s described above, **the meter 502 can determine the price per game credit from the data** or instructions associated with Software Control Block 706 of the game program 26.” EX1008, 63:45-48 (emphasis added and in original).

Indeed, Schneier143's disclosure expressly teaches that meter 502 uses time or day as a piece of data associated with its determinations:

For example, the meter 502 may prevent game play between the hours of 11 pm and 7 am to prevent children from playing late into the night. Rates for enabling play can be *varied depending upon the time or day* of play as well. *Id.*, 62:46-49 (emphasis added); *see also* Pet., 32 (“the multiplier may be reduced during a period of high demand, while also increased during a period of low demand”). Because the data considered by meter 502 includes data relating to the time or day, Schneier143 expressly discloses this limitation.

Regardless, Schneier143's disclosure that “[a] purchase of ten credits may cost \$0.50 each while a purchase of twenty credits may cost \$0.30 each” does disclose that the “multiplier is variable over time.” Pet., 31 (citing EX1008, 63:31-34); *see also* Crevelt ¶120. Against, the claim recites “variable over time,” not

'based on time.' EX1001, cl. 8. The change in the cost of credits would occur "over time" because, as PO admits, one purchase of ten credits can occur "at one point in time" and another purchase of twenty credits can occur at another point in time. POR, 6. And these factors would also change as the player engaged in game play over a period of time (e.g., an hour of game play). *See* EX2004 (Crevelt Tr.), 156:24-157:19. In other words, the multiplier is changing ("variable") over the course of game play ("over time"). Pet., 31.

Mr. Crevelt confirms that Schneier143 discloses "variable over time," explaining that credits vary by the time and quantity in which they are purchased:

That is one example of where the multiplier is variable and it's ***variable based on the time you buy*** and the amount you bought it in, because not everybody buys in at the same amount.

EX2004, 148:16-22 (emphasis added). Factors involving the player and their game play can change at any given time, and these factors change both the multiplier, and the quantity of player-purchased credits per cash amount "over time." *Id.*; *see also* EX1008, 63:6-34.

Thus, Schneier143's broad disclosure and descriptions of how "[t]he number of credits that a player receives per dollar may also be variable" includes the teaching that the multiplier is variable over time.

c. Schneier143 discloses the “multiplier is variable over time” with its protocol on updating cost information, as depicted in Figure 19

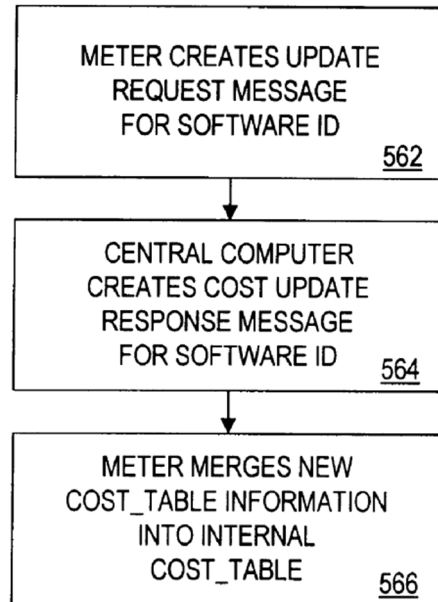
Regardless, there is no credible argument that Schneier143's disclosure of updating the multiplier determined by meter 502 using the updating cost information protocol does not expressly teach that the “multiplier is variable over time.” PO contends the opposite, stating that the protocol cannot “be used to vary the value of virtual currencies across different time periods.” POR, 6-7. This argument has no foundation in fact or logic.

Schneier143 does not merely describe how the system “can obtain updated cost information from a central computer” as characterized by PO. POR, 6. Instead, Schneier143 explains how varying cost options selected by users during game play are processed. *See* Pet., 31; Crevalt ¶120; EX1008, 56:1-3 (“This protocol is used when the meter 502 requires updated cost information...for metered programs 503 that *the player is currently using*.”). Cost options can change as they are selected by the user and at the end of each billing cycle:

[The protocol] is only employed if the variable cost option is selected, and is run after the Adding a New Program protocol, as well as during the regular set of protocols run at the end of each billing cycle...

EX1008, 56:1-10. As Mr. Crevelt explained, this demonstrates a variation in the value of cost options across different time periods because the cost options are

altered at any given time, while the player is using the program over time. *See* EX2004, 160:24-161:17; *see also* EX1008, Fig. 19 (below).



EX1008, Fig. 19

PO wrongly asserts that “Petitioner’s expert repeatedly refused at deposition to explain how this discussion in Schneier143 disclosed that a multiplier for virtual currency purchased with cash is variable over time – merely asserting in conclusory fashion that it’s in there somewhere.” POR, 7. PO mischaracterizes Mr. Crevelt’s testimony.¹ In fact, Mr. Crevelt *never* stated that “it’s in there somewhere.” *Id.*

¹ Petitioner’s expert promptly answered all of PO’s questions at his deposition. However, displeased with the responses provided by Mr. Crevelt, PO proceeded to

Rather, Mr. Crevelt explained in detail how Schneier143 discloses a multiplier that is variable over time through the Updating Cost Information protocol. For instance, Mr. Crevelt explained that Schneier143's metered game play involves a player purchasing time to play, credits to play, or a certain number of games for a specific game at rates that can vary over time. EX2004, 160:24-161:6 (“[I]t is updating that cost value that is being used to – for a metered play where you’re buying so much time or so many credits or so many games on a specific game and when it runs out, then have you to buy more, and ***that variable can change over time***”) (emphasis added).

Mr. Crevelt also described how Schneier143's Figure 19 indicates that a “multiplier is variable over time.” See EX2004, 161:7-17 (“The entire description of [Figure] 19 talks about changing that metered value and changing that metered value from a central site, ***which means it can change over time***”) (emphasis added); *id.*, 181:20-182:6 (“That’s the process it’s describing, updating the cost and information in variable timing. That is ***updating the variable—updating the metered value, which is your transfer, your multiplier, essentially, for over time***...And it’s described very clearly there and in greater detail in the description of figure 19”)

ask the same question over the course of fifteen minutes in an attempt to intimidate Mr. Crevelt into changing his response. See generally EX2004, 161-182.

(emphasis added). Thus, updating the metered value (i.e., the multiplier) at the central site serves to adjust the pricing structure for each game as the game is played *over time*. *Id.*

d. Schneier143 discloses a “multiplier is variable over time” when it states “each credit may entitle the player to play for a certain period of time....”

Finally, PO argues that Schneier143 does not disclose that “the multiplier is variable over time” when it discloses “each credit may entitle the player to play for a certain period of time...[O]ne credit may buy five minutes of play while two credits may buy twelve minutes of play.” POR, 7. PO asserts this is because “[i]t provides no indication...that the amount of credits that may be purchased with cash ever varies,” “only that at *one* moment in time, one credit may purchase a certain amount of time, and two credits may purchase a different amount of time.” *Id.*, 7-8 (emphasis in original). PO's interpretation is, again, incorrect.

Yet again, the claim recites “variable over time,” not “variable based on time.” And the Petition explains that in Schneier143, a player may play at different rates over a period of time depending on how much time a credit is worth. Pet., 32; Crevelt ¶121. For instance, over the span of an hour, five minutes could be played at an initial (low) rate and the remaining time played at another (higher) rate. *See e.g.*, EX2004, 156:9-15 (“Schneier is showing multiple embodiments of this...depending on your system, you may be able to, at one time, buy at a given

price, fixed price. You may be able to buy by time. Or you may be able to use this variable transfer and credit variable costs”), 151:15-153:3 (“Schneier does indicate, like I said,...that it is variable over time, ‘time’ being a relative term, that you may be playing the game where...you’re able to, at that time, buy additional credits, and based on the amount of your purchase. ... the multiplier can change based on how much you spend.... And that can change...based on instructions...”), 156:24-157:19.

Indeed, Mr. Crevelt specifically explained that the Schneier¹⁴³ disclosure about which PO complains does disclose “variable over time” where in one time frame a user could purchase credits at one rate and then purchase credits at another rate in another time frame:

Q: ...One credit may buy five minutes of play while two credits may buy 12 minutes of play. That’s, right now, in one instant, right, that you can – you have a choice, you can either –

A: That’s within *a given time frame*.

Q: -- send one credit – yeah.

A: *In another time frame* it may be based on whatever credit, how much you buy, how many credits you get. The multiplier embodiments in this is something that Schneier is showing, you have multiple ways you can do this and the person skilled in the art know they could implement any or all of these at any given time.

EX2004, 156:24-157:19 (emphasis added).

Accordingly, in view of the foregoing, Schneier143 discloses that the
“multiplier is variable over time.”

III. CONCLUSION

The Board should find all the Challenged Claims unpatentable.

Dated: March 27, 2026

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that foregoing **PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE** exclusive of the parts exempted as provided in 37 C.F.R. §42.24(c), contains 2,804 words and therefore complies with the type-volume limitations of 37 C.F.R. §42.24(c).

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CERTIFICATE OF SERVICE

I hereby certify that on March 27, 2026, a true and correct copy of the foregoing **PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE** is being served by electronic mail on Patent Owner's counsel of record listed below, pursuant to its Mandatory Notices:

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