REMARKS

Upon entry of the foregoing amendment, claims 9, 11-14, and 16-19 are pending.

Claims 9, 14, and 19 are independent. Claims 9, 14, and 19 are amended. No new claims are added. No claims are cancelled. Applicant respectfully requests entry of the amendment after final rejection.

Exemplary support for amendment is provided at *Spec.* ¶¶ [0010], [0023] and FIG. 6 items S403, S404, and S405.

A Final Office Action was issued on December 12, 2019.

Below "*Dec.*" refers to the declaration under 37 CFR § 1.132 filed on December 2, 2019. "*Spec.*" refers to the application as originally filed.

Before addressing the rejections, Applicant provides a review of the Specification.

Review of the Application

As disclosed in the specification, an information processing device is configured to automatically display images one after another at predetermined intervals. A problem occurs when a user intends to click on a pre-switching image of a display, but instead clicks on a post-switching image. *Spec.* ¶ [0004], *Dec.* ¶ [14].

> **Technical Problem** However, depending on the timing of switching among the advertisement images and the timing when a user clicks an image, ***the user may be taken to an unintended advertisement page through screen transition***.

Spec. ¶ [0004] (including heading from specification, emphasis added).

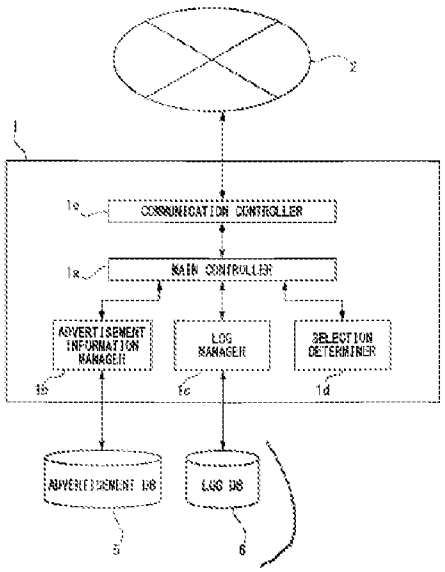
> **Solution to Problem** ... ***When switching between images displayed in a partial area on a web page has been performed***, the information manager *keeps information about a pre-switching image even after the switching*. The timing information retriever retrieves *the timing of the switching and* ***the timing of a selection operation by a user*** *on the area. When* ***the timing information retriever retrieves the timing of the selection operation within a predetermined time length after the switching***, *the selection determiner makes a determination as to which of the pre-switching image and a post-switching image* ***the selection operation is intended for***.

Spec. ¶ [0004] (including heading from specification, emphasis added).

As mentioned above, an automatic switching of the images may take place at a timing when a user performs a click operation. *Dec.* ¶¶ [14], [18]. When the user clicks a second image and the click operation by the user is performed just after the automatic switching, it is determined that the click represents the user's intention that the user desires to acquire information associated with a first image. *Dec.* ¶¶ [45]-[46], *Spec.* FIG. 5 S105 Y branch. Then, the information associated with the first image (i.e. not the second image) is provided. *Dec.* ¶¶ [27], [47], *Spec.* FIG. 6 item S404.

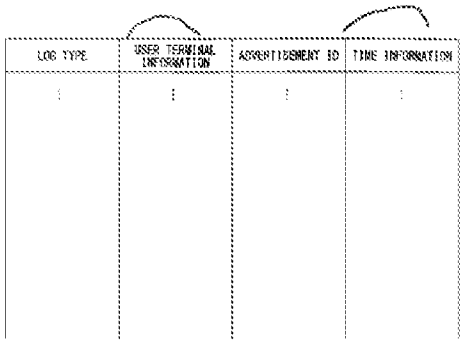
User selections are stored in a history in a database. "FIG. 3 is a diagram showing logs stored in a log DB[.]" *Spec.* ¶ [0013].

Fig. 2



Spec. FIG. 2 Log DB 6 (annotated).

Fig. 3



Spec. FIG. 3 (annotated).

The system records information requests. An incorrectly-processed request causes wrong information to be stored in the data base.

> An example log stored in the *log DB 6* is now described with reference to FIG. 3. The log is provided with the entries "log type", "*user* terminal information", "advertisement ID", and "time information".
>
> The log type is available in two options: "banner request" and "advertisement request". The "banner request" is set for the above banner advertisement information request log and "advertisement request" is set for the above selected advertisement information request log.
>
> The user terminal information is information *identifying a user terminal* 4. Examples of the user terminal information include an Internet Protocol (IP) address and a Media Access Control (MAC) address.
>
> The advertisement ID is information uniquely *identifying one of the various advertisements* stored in the advertisement DB 5.
>
> *The time information can be used to estimate the time at which an operation or a process to be logged* ***was performed***. The time information of a log whose log type is "banner request" is, for example, *the date and time at which the advertisement delivery system 1* ***receives the banner advertisement information request***. The time information of a log whose log type is "advertisement request" is, for example, the date and time at which the advertisement delivery system 1 receives the selected advertisement information request.

Spec. ¶ [0022] (emphasis added).

Using embodiments of the application, wrong information is prevented from being stored in the database. "This prevents the time-wasting screen transition to an advertisement page for

an item that the user does not intend to purchase and also prevents the unintended item from being recorded in a viewing history." *Spec.* ¶ [0051]. This problem and solution is corroborated by *Dec.* ¶ [16] ("A PHOSITA would understand, based on the specification, that due to the occasional selection operation by a user just after a switching time, ***previous practice*** without the benefit of the solution described below (paragraphs [21]-[28]) included lost time for the user, lost revenue for, in the example, advertisers, and *corrupted information in databases with respect to user history*.")(emphasis added).

There is a nexus to the claims.

The present application provides a solution in which even when a user selects a second image, a computer performs an estimate that the user has intended to select not the second image but an earlier, first, image. *Spec.* ¶ [0004], *Dec.* ¶¶ [33], [41]-[47], The determination of intention is based on the relationship between starting display times of the first and second images and a time of user selection. This solution improves the efficiency of user image selection and viewing. The displayed images, in some embodiments are associated with web addresses (URLs). *Dec.* ¶¶ [11], [12], [15].

The problem occurs because the user wanted first information of the first URL, but instead gets second information of the second URL; the desired first information is not the same as the mistaken second information. *Spec.* ¶ [0004], *Dec.* ¶ [18] ("The second URL associated with the second image will be used to fetch second information, which the user *did not wish to see*[.]")(emphasis added).

The problem occurs at the display, and is thus at a man-machine interface. *Dec.* ¶ [15].

Because of the problem, there is lost time for a user, possible lost revenue, and ***corrupted information in databases.*** *Dec.* ¶ [16]. Due to the technical problem of the display and a fraction of a second, wrong information may occur. *Dec.* ¶ [19].

To solve this problem of determining user intent, the disclosure states that user intent associated with a user click can be determined based on a time difference with respect to the click and a switching time of a displayed image in a web page. *See, e.g., Spec.* at ¶¶ [0004], [0019], [0053]. Based on using a time difference to avoid a wrong association of user intent with a timing of a user click on an undesired displayed second image due to an unfortunate image switching time, proper information can be provided to a user and also a history can avoid

corruption. *See, e.g., Spec.* at ¶¶ [0021] (time difference information), [0022] (time difference log in database 6), [0023] ("This determination process ***determines which banner advertisement the banner advertisement selection operation by a user is intended for***.")(emphasis added), [0005] ("keeps information about a pre-switching image even after the switching"), [0009] (the solution "***prevents the unintended item from being recorded in a viewing history***.")(emphasis added).

FIG. 6 items S403 and S404 illustrates making the decision about which image to display by determining a user's intention based on a difference of a user selection time T1 and an image switching time T2 being less than a threshold value T0. Note T0 (predetermined value), T1 (time of user selection, for example, a click), and T2 (time when the display changes to the second image) of S403).

Rejections

Claims 9, 11-14, and 16-19 are rejected under 35 U.S.C. § 112(a) as allegedly failing to comply with the written description requirement.

The § 112(a) rejection is with respect to the claim 9 feature "third time occurred in less time after the second time than required to form an intention to select the second image" (hereinafter "Time and Intention Feature"). Office Action at page 7.

Applicant maintains that the Time and Intention Feature complies with the written description requirement of § 112(a). Applicant refers to arguments to that effect given in the Interview Agenda of the interview of March 19, 2020.

Based on the interviews of March 19, 2020 and April 10, 2020, it is Applicant's understanding that clarification of the Time and Intention Feature will lead to withdrawal of the § 112(a) rejection.

Therefore, without acquiescing to the propriety of the § 112(a) rejection, Applicant has amended solely for further clarity.

Claim 9 recites (emphasis added):

> selection determining code configured to cause at least one of said at least one processor to determine:
>
> i) the selection operation is an operation to select the first image when a difference between the third time and the second time is less than a predetermined value, *wherein the first image is a pre-switching image, the second image is a post-switching image, and the selection determining code is further configured to,*

based on the predetermined value, detect whether the selection operation by the user is intended for the pre-switching image or the post-switching image, and

ii) the selection operation is an operation to select the second image when a difference between the third time and the second time is greater than or equal to the predetermined value,

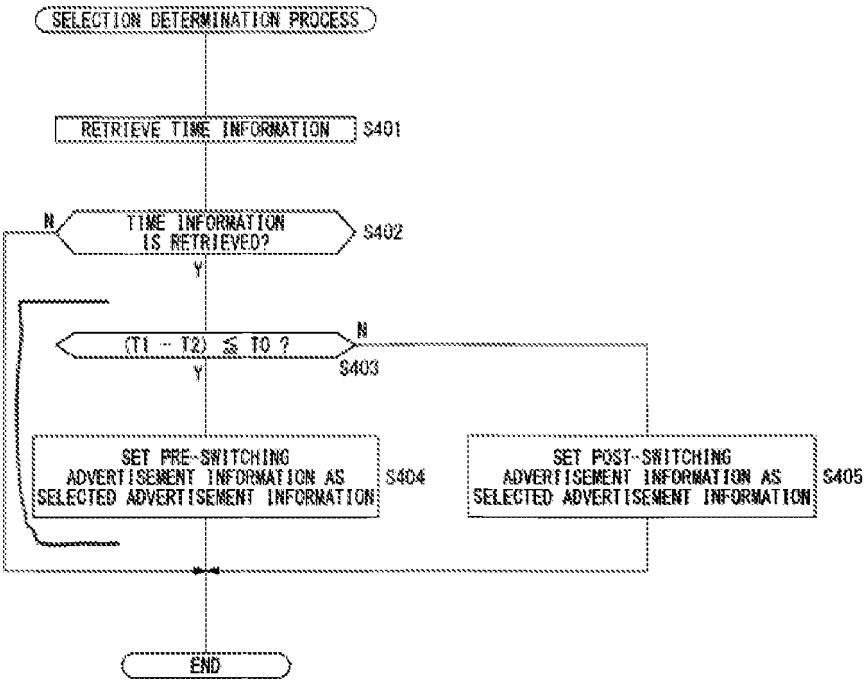
Exemplary support for the amendment is provided at *Spec.* ¶¶ [0010], [0023] and FIG. 6 items S403, S404, and S405.

> The selection determiner 1d of the advertisement delivery system 1 shown in FIG. 2 performs the above determination process requested from the main controller 1a. Specifically, the selection determiner 1d performs a process for *determining whether the time difference between the timing information of the banner advertisement switching process on the user terminal 4 (banner advertisement information request log) and the timing information of the banner advertisement selection operation by a user(selected advertisement information request log)* ***is less than or equal to a predetermined time length***, and notifies the determination result to the main controller 1a. This determination process *determines which banner advertisement the banner advertisement selection operation by a user is* ***intended*** *for*. The main controller 1a receives the notification and performs a predetermined process (selection handling process). Some examples of the determination process are described below.
>
> The communication controller 1e performs a process for sending information, received over the communication network 2, to the main controller 1a and a process for sending various types of advertisement information, passed from the main controller 1a, to the user terminal 4.

Spec. ¶ [0023] (emphasis added)(this application paragraph in cludes more than one paragraph).

> ... When switching between images displayed in a partial area on a web page has been performed, information about a *pre-switching image* is kept even after the switching. The timing of the switching and the timing of a selection operation by a user on the area are retrieved. When the timing of the selection operation is retrieved within a predetermined time length after the switching, a determination is made as to which of the *pre-switching image and a post-switching image the selection operation is intended for*. Then, a selection handling process based on information about the pre-switching image or the post-switching image is performed based on the determination.

Spec. ¶ [0010] (emphasis added)(a portion).



Spec. FIG. 6 (annotated)(see times T0, T1 and T2 at S403). FIG. 6 of the specification illustrates making a decision about a display image based on a difference of a user selection time T1 and an image switching time T2 being less than a threshold value T0.

Thus, to advance prosecution, Applicant has amended claim 9 by clarifying the language. Claim 9 recites (emphasis added):

> i) the selection operation is an operation to select the first image when a difference between the third time and the second time is less than a predetermined value, *wherein the first image is a pre-switching image, the second image is a post-switching image, and the selection determining code is further configured to, based on the predetermined value, detect whether the selection operation by the user is intended for the pre-switching image or the post-switching image.*

The recitation of claim 9 is supported by *Spec.* ¶¶ [0010], [0023] and FIG. 6 items S403, S404, and S405. as shown above. Claims 14 and 19 use the same language emphasized above and comply with § 112(a) for the same reason. Applicant respectfully requests that the Examiner reconsider and withdraw the § 112(a) rejection.

Claims 9, 11-14, 16-19 are rejected under 35 U.S.C. § 101 as allegedly not directed to patent eligible subject matter. Applicant respectfully traverses.

From the interview of March 19, 2020, Applicant has the understanding that the Examiner will consider an argument that claim 9 is not directed to an abstract idea based on an argument at Prong 2 that claim 9 represents an improvement to a technology area. The remarks below are made with a goal of completeness.

§ 101 Prong 2 Arguments

Summary Argument

The application describes user information stored in databases. *Spec.* FIG. 2 and ¶ [0022]. The application suggests that previous methods allowed wrong information to be stored in a user viewing history. The application describes that embodiments of the application prevent storing the wrong information in user viewing histories. There is a nexus to the claims. Therefore, the claims are eligible at Prong 2.

For example, as mentioned above, using embodiments of the application, wrong information is prevented from being stored in the database. "This prevents the time-wasting screen transition to an advertisement page for an item that the user does not intend to purchase and also ***prevents the unintended item from being recorded in a viewing history***." *Spec.* ¶ [0051]. This problem and solution is corroborated by *Dec.* ¶ [16] ("A PHOSITA would understand, based on the specification, that due to the occasional selection operation by a user just after a switching time, ***previous practice*** without the benefit of the solution described below (paragraphs [21]-[28]) included lost time for the user, lost revenue for, in the example, advertisers, and *corrupted information in databases with respect to user history.*")(emphasis added).

The prevention of identifying the unintended item as the item to be obtained (and store) has is a nexus to the claims, as shown for example, by claim 9:

> i) the selection operation is an operation to select the first image when a difference between the third time and the second time is less than a predetermined value, *wherein the first image is a pre-switching image, the second image is a post-switching image, and the selection determining code is further configured to, based on the predetermined value, detect whether the selection operation by the user is intended for the pre-switching image or the post-switching image.*

Claims 14 and 19 are patent eligible at Prong 2 for the same reason.

Applicant respectfully requests that the Examiner reconsider and withdraw the § 101 rejection of claims 9, 14, and 19.

Further 101 Arguments

The application has a particular machine aspect, consider the evidence of *Dec.* ¶ [20] and MPEP § 2106.05(b).

PEG requires determining a BRI reading of the claims before making a decision regarding § 101. A reasonable claim interpretation, Applicant submits, must consider the machine aspect described in the application and which has a nexus to the claims. MPEP § 2131. The claims cannot be practiced, under BRI, in the human mind (not even as a matter of judgment or observation).

Rather than a matter of human judgment or observation, the application addresses a technical problem of a man-machine interface. "A PHOSITA would understand that the problem occurs at a man-machine interface. The user has decided to take an action, and the machine has decided to take an action. When these actions coincidentally overlap in a certain way, the machine will understand the user selection operation as directed to a second URL associated with a second image." *Dec.* ¶ [15].

"A PHOSITA would view this problem as something that cannot be solved in the human mind, because the delay of the human mind and human physical coordination are a cause of the problem." *Dec.* ¶ [20].

The specification discloses a display with a display area. The specification describes a particular problem of an asynchronous transition image in the display area. The claims are linked to a particular machine, a display. *Spec.* Abstract, ¶¶ [0025], [0027].

The application has a particular machine aspect, including asynchronous human and machine events.

The Office Action discusses a sales person example in which fabrics are held up for selection. Office Action at pages 10-11. Applicant respectfully submits that the problem addressed by the application must be considered.

A man-machine interface problem in which *asynchronous human and machine events* occur near each other in time is not a process of the human mind and is not a matter of judgment

or observation associated by PEG with the mental processes grouping. The asynchronous image transition problem addressed at the man machine interface is not analogous to the sales person example since there is no resulting problem of obtaining and presenting unintended information with the associated loss of time, confusion, and corruption of history data.

As described above, there is a computer benefit of avoiding corrupting memory. MPEP § 2106.05(a) is applicable.

Applicant respectfully submits that the application provides a solution and there is a nexus in the claims to the action/solution. The sales person of the Office Action does not have an analogy to the action solution of the claim.

Claim 14 recites in part (emphasis added)(claim 9 is similar):

> *A) when the selection by the user corresponds to the first image:*
> ***obtaining the first information associated with the first image,***
> *and*
> ***providing the first information via the display area;*** *and*
> *B) when the selection by the user corresponds to the second image:*
> *obtaining the second information associated with the second image, and*
> *providing the second information via the display area.*

This is an action step, this is a claim 14 feature corresponding to opening the rubber mold in *Diamond v. Diehr 450 US 175 (1981)*: "A) when the selection by the user corresponds to the first image: obtaining the first information associated with the first image." There is no such step in the sales person example, and so there is no problem solved of *obtaining* , subsequent to a selection, and presenting the wrong information.

This is the claim step that delivers, for example, *avoiding corrupting a history memory of a computer with wrong information.*

"This prevents the time-wasting screen transition to an advertisement page for an item that the user does not intend to purchase and also ***prevents the unintended item from being recorded in a viewing history***." *Spec.* ¶ [0051] (emphasis added).

Because claim 14 does not fit into the "mental processes" grouping of PEG, Applicant respectfully requests that the Board reverse the § 101 rejection of claim 14.

"The claim features are meaningful and work together to obtain the improvement of saving time, avoiding frustration, and avoiding corruption of associations in memory." *Dec.* ¶ [55].

Applicant respectfully requests that the Examiner reconsider and withdraw the § 101 rejection of claims 9, 14, and 19.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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