

# System and Method for Digital Advertising using Social Media

## Provisional Patent Application

System and Method for Digital Advertising using Social Media

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## Prior Art.

### US Patent Documents

|                     |            |                                     |
|---------------------|------------|-------------------------------------|
| US Pat. 8234157     | Jul., 2012 | Viadimirskiy et al. 705/14.69.      |
| US Pat. 8335716     | Dec., 2012 | Gurumoorthy et al. 705/14.41 et al. |
| US Pat. 8375024     | Feb., 2013 | Goeldi 707/722 et al.               |
| US Pat. 8392252     | Mar., 2013 | Tam et al. 705/14.41 et al.         |
| US Pat. 20050149396 | Jul., 2005 | Lim et al. 705/14.41 et al.         |
| US Pat. 20130031577 | Jan., 2013 | Pixley 725/32.                      |
| US Pat. 20130046615 | Feb., 2013 | Liyanage 705/14.45.                 |
| US Pat. 20130046839 | Feb., 2013 | Chuard et al. 709/206.              |
| US Pat. 20130060628 | Mar., 2013 | Catrambone 705/14.41.               |

## Advantages.

Various aspects of the system and method for digital advertising using social media may have one or more of the following advantages:

- Provide a more complete, end-to-end advertising experience
- Provide a more targeted method for identifying users to generate content
- Provide a more integrated approach for sharing content to social media networks
- Provide a more targeted method for identifying users to view content
- Provide a more results-oriented method for determining advertisement effectiveness

## Drawings.

FIG. 1 illustrates an exemplary digital advertising network environment using social media;  
FIG. 2 is a block diagram of an exemplary system and method for digital advertising using social media;  
FIG. 3A is an exemplary screen shot of a web page to view and access featured projects;  
FIG. 3B is a block diagram of an exemplary system component to view and access featured projects;  
FIG. 4A is an exemplary screen shot of a web page to view and access all projects that a user sponsored, advertised, and/or is eligible to advertise;

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FIG. **4B** is a block diagram of an exemplary system component to view and access all projects that a user sponsored, advertised, and/or is eligible to advertise;

FIG. **5A** is an exemplary screen shot of a project web page that a user has selected to advertise;

FIG. **5B** is a block diagram of an exemplary system component enabling a user to advertise a project using social media;

FIG. **5C** is an exemplary screen shot of a project that a user is advertising using social media;

FIG. **6** is an exemplary screen shot of a project that a user is sponsoring;

FIG. **7A** is an exemplary screen shot of a web page to input project details as its sponsor;

FIG. **7B** is a block diagram of an exemplary system component to sponsor a project;

FIG. **7C** is an exemplary screen shot of a web page to preview and submit a project as its sponsor;

FIG. **8A** is an exemplary screen shot of a web page to confirm an email address, account for payment, and social networks as well as view sponsored and advertised projects; and

FIG. **8B** is a block diagram of an exemplary system component to confirm an email address, account for payment, and social networks.

### Detailed Description.

The inventors listed invented a system and method for digital advertising using social media. Relevant prior art includes systems that allow users to upload digital content, methods to scrape social media web pages, and methods to determine advertisement effectiveness using points-per-click methodologies. The system and method **130** provides a more complete, end-to-end advertising experience enabling advertiser users **101B** to search for projects submitted by our sponsor users **101A**, generate digital advertising content for multiple projects, submit valid **454** social media post URLs **540** associated with the projects, associate the advertising content with the projects to the benefit of sponsor users **101A**, advertiser users **101B**, and the advertisement's intended audience **140**, and earn project budget based on user inputs, quantitative, and/or qualitative measures from social media, sponsors, users, and/or the like.

The system and method **130** may host a website that allows one or more users **101**, e.g., the sponsor user **101A** to sponsor a project for advertiser users **101B** to advertise using social media **135**, at one or more user devices **110** via a communications network **120** to the website. User devices **110** include a computer terminal, a personal digital assistant (PDA), a wireless telephone, a smart phone, a smart phone application, and/or the like. Communications network **120** includes a local area network (LAN), a wide area network (WAN), a wireless network, a cellular network, an intranet, an internet, and/or the like.

The system terms of use **202** is accessible via a terms of use link **308** on the web page to view and access featured projects **300**. The terms of use **202** apply to all visitors, users, and others who access the service. Non-users **102** may view projects **206** as well as apply and register **204** by accessing an online application via apply/register link **304** on the web page to view and access featured projects **300**. If deemed appropriate for membership, non-users **102** will receive a confirmation code to use during registration. Users **101** are also given read-only access to view projects **350** until they login **355**. Users **101** unable to login may use forgot password functionality **360** via forgot password link **306**. Users **101** may login by entering required login information **310**, such as registered email address **312** and

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password **314**. Once logged in, users **101** may access their homepage **208** as well as advertise and sponsor projects **210**. System activity is stored in a number of databases, schemas, and tables referred to as an activity database **212**.

The web page to view and access featured projects **300** consists of two sections; first, the top three ranked projects based on the project budget remaining divided by number of days before project end date which is also the default option for the filtering drop-down **434**. The top three projects are controlled by finger swipe or left scrolling **307L** and right scrolling **307R** buttons. Projects ranked fourth through sixth are displayed underneath. Each featured project **320** displays the project name **322**, project image **324**, project budget **326**, project start and end date **327**, project budget earned and total project budget **328**, and number of advertiser users **101B** advertising the project **329**.

Successfully login **465** or click on a project image **324** to access the web page to view and access all projects that a user is sponsoring, advertising, or is eligible to advertise **400**. Non-users **102** will have read-only access. Sponsor users **101A** can view projects that they are sponsoring **495B** and sponsor additional projects **495A** via the submit projects link **416**. Advertiser users **101B** can view projects that they are advertising **490B** and advertise additional projects **490A** via the advertise project button **429**. Username and ranking **406** are displayed if user **101** is logged into the system **465**. Timestamp of last update to user ranking and statistics of projects that the user is advertising **407** is also displayed if user **101** is logged into the system **465**. Else, link to login is displayed. Please note that a user **101** can be both a sponsor user **101A** and advertiser user **101B**. By default, all projects are sorted by project budget remaining divided by number of days before project end date and limited to 10 results to display. Projects may be filtered via the filtering drop-down **432**, sorted via the sorting drop-down **434**, and limited via the results per page drop-down **436**. Search for a project using the search functionality **440** by selecting the search criteria **442** and typing the keyword to search **444**. Each project has its own section of project information **420** displaying project name **421**, project image **422**, project status **423**, project sponsor **424**, project start and end date **425A**, number of days before project end date **425B**, project budget earned and total project budget **426A**, project budget remaining **426B**, number of advertiser users **101B** advertising the project **427**, and project description **428**. If the project start date is in the future then days to start and days from start date to end date will be displayed. Project status will be in one of three states: sponsoring shown by grey arrow, advertising shown by purple arrow, or eligible to be advertised shown by no arrow with an advertise project button **429** displayed. To sponsor a project **495A** or advertise a project **490A**, the user **101** must have successfully logged in **465** and have confirmed email address, account for payment, and social networks **475**. To confirm this information, the user **101** must access their homepage **485** and complete the confirmation section **820**. Help documentation is available via the image link **404** located underneath the navigation section **410**.

Advertiser users **101B** can view a project that they are advertising **490B** or advertise additional projects **490A** via the advertise project button **429** and they will be redirected to a web page specific to the project and advertiser user without associated social network posts **500**. Notice that the filtering drop-down **432** displays “selected” to notify that a specific project has been selected. The selected project has its own section of project information **420** and advertiser-specific section of advertising information **510**. The advertiser-specific section of advertising information **510** contains a separate row for each social media network, e.g. YouTube, Instagram, and/or the like. If advertiser users **101B** have not confirmed ownership of the social media account **525** as they have claimed on their homepage **800**,

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then a link will be displayed to confirm the social media account **512**. If the social media account is confirmed, then the advertiser user **101B** may associate the digital content posted on their social network account to the project by entering the social post URL **514** and selecting the submit button **516**. The social post URL **514** is validated **545** to ensure that the social post was created after the project start date, is associated with the social media account confirmed by the advertiser user **101B**, and has not already been associated with another project.

Advertiser users **101B** may associate one piece of digital content (e.g. YouTube video, Instagram photo, and/or the like) per social network for a project. A web page specific to the project and advertiser user with associated social network posts **550** displays a link to the social media content on YouTube **562A**, social media content on Instagram **562B**, and/or the like. Each posting displays the social network's equivalent to views, likes, comments, and/or the like. For example, budget earned for a YouTube posting **563A** from the sponsor user **101A** to the advertiser user **101B** is based on a calculation involving views **564**, likes **565** / dislikes **566**. The calculation for budget earned for a YouTube posting **563A** is equal to

$\min(\$postMetricFixedRate, \$postMetricVariableRate) * \$postViewsTotal * \$projectPostLikePercent$ ; where

- *min* – find lowest value
- $\$postMetricFixedRate = \$0.001$
- $\$postMetricVariableRate = \$projectBudget / \$postViewsTotal$
- $\$projectBudget = \text{total project budget}$
- $\$postViewsTotal = \text{YouTube views}$
- $\$projectPostLikePercent$ 
  - If (YouTube likes) + (YouTube dislikes) = 0, then  $\$projectPostLikePercent = 0.5$
  - Else,  $\$projectPostLikePercent = (\text{YouTube likes}) / [(\text{YouTube likes}) + (\text{YouTube dislikes})]$

Similarly, budget earned for an Instagram posting **563B** from the sponsor user **101A** to the advertiser user **101B** is based on a calculation involving hearts **567** and comments **568**.

$\min(\$postMetricFixedRate, \$postMetricVariableRate) * \$postViewsTotal$ ; where

- *min* – find lowest value
- $\$postMetricFixedRate = \$0.001$
- $\$postMetricVariableRate = \$projectBudget / \$postViewsTotal$
- $\$projectBudget = \text{total project budget}$
- $\$postViewsTotal = [(\text{Instagram hearts}) + (\text{Instagram comments})]$

Both calculations use the min function to guarantee that the budget earned never exceeds the total project budget. FIG. **5C** illustrates \$0.10 project budget earned and \$1,025 total project budget **426A** based on social media content on YouTube **562A** plus social media content on Instagram **562B** as an exemplary embodiment of the invention. The advertiser user **101B** may reload post statistics **547** for a specific project's budget earned for each social network posting's equivalent to views, likes, comments, and/or the like by selecting on the YouTube reload action button **561A**, Instagram reload action button **561B**, and/or the like. Reloading post statistics **547** triggers code to scrape the social media post **548** and

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update the activity database **212**. If successful, success message **552** is displayed to the advertiser user **101B**. If unsuccessful, an error message will be displayed instead of success message **552**. Advertiser users **101B** may reload post statistics **547** for all projects that they are advertising **490B** by selecting on the user refresh statistics link **446**.

Sponsor users **101A** can view a project that they are sponsoring **495B** or sponsor additional projects **495A** via the submit projects button **416** and they will be redirected to a web page specific to the project and sponsor user **600**. Notice that the filtering drop-down **432** displays “selected” to notify that a specific project has been selected. The selected project has its own section of project information **420** and sponsor-specific section of advertising information **560**. The sponsor-specific section of advertising information **560** contains a separate row for each advertiser user **101B** and social media network, e.g. YouTube, Instagram, and/or the like. FIG. 6 illustrates two advertiser users **101B** advertising the selected project. The first advertiser user **101B** has chosen to advertise the project **490A** and submitted valid **454** social media post URLs **540**; one media post URL for YouTube **562A** and another media post URL for Instagram **562B**. The second advertiser user **101B** has chosen to advertise the project **490A** but has not yet submitted valid **454** social media post URLs **540** to associate to the selected project. A message is displayed for the advertiser user **101B** without an associated YouTube post **612A** and without an associated Instagram post **612B**. The sponsor user **101A** can view all advertiser users **101B** advertising the project and their social network postings, if associated. Please note that users **101** may act as both sponsor users **101A** and advertiser users **101B** but cannot advertise their own sponsored projects.

To sponsor a project **495A** or advertise a project **490A**, the user **101** must have successfully logged in **465** and have confirmed email address, account for payment, and social networks **475**. To confirm this information, the user **101** must access their homepage **485** and complete the confirmation section **820**. To sponsor a new project **495A**, users **101** can click the submit project link **416** and they will be redirected to a web page of required and optional project fields **700**. Project timeline **701**, project name **702**, project budget **703**, project category **704**, and agreement **708** to terms of use **202** are required. Project URL **705**, project image URL **706**, and project description **707** are optional. Clear project details to start over by selecting the clear button **709B**. Review project details **780** by selecting the preview button **709A**. If you are satisfied with the previewed project details, select the submit button **789** to submit your project. To modify, use the browser’s back button to return to the previous web page of required and optional project fields **700**, edit details, and reselect the preview button **709A**. Please note that a sponsored project is not active and/or visible **760** until the project has been activated **760**, i.e. payment agreement met and/or other review procedures completed. Once activated, the project will be visible on the web page to view and access all projects that a user is sponsoring, advertising, or is eligible to advertise **400**. The project may also appear on the web page to view and access featured projects **300** if it ranks among the top six projects based on project budget remaining divided by number of days before project end date.

To utilize all aspects of the system, users **101** must have successfully logged in **465** and have confirmed email address, account for payment, and social networks **475**. To confirm this information, users **101** must access their homepage **485** and complete the confirmation section **820**. This information is confirmed to reduce the possibility of advertiser users **101B** impersonating as the owner of another’s social network account and/or posts. The first step to confirm an email address, account for payment, and/or social network **855** is entering the email address, username, and/or user identifier of the account

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that you claim ownership **860**. The value entered is valid **865** if that value has not already been confirmed by another user **101** and meets the formatting rules of the account type. FIG. **8A** contains an exemplary example of entering a Facebook user identifier **825** to claim ownership **860**. The second step is enter the confirmation code messaged to the claimed account **870** sent via the messaging functionality of account type, e.g. email, PayPal, YouTube, Instagram via instaDM, and/or the like. If a user **101** has access to the account, then he or she will be able to retrieve the confirmation code, enter it into the appropriate account confirmation field **827**, and select the confirm button **829A**. If the confirmation code entered by the user **101** matches what is stored in the activity database **212**, then the account has been ✓ confirmed **880**. If the confirmation code entered is incorrect, an error message will display and the user **101** may try again.

In addition to confirming email address, account for payment, and social networks **475**, the homepage **800** also displays the projects that the user is advertising **830** and the projects that the user is sponsoring **840**. The homepage **800** also provides a user summary **810** of number of projects advertising **812**, project budget earned and project budget remaining from projects advertising **814**, and a more prominent display of project budget earned **816**.

There are many alternative ways that the system and method for digital advertising using social media can be implemented:

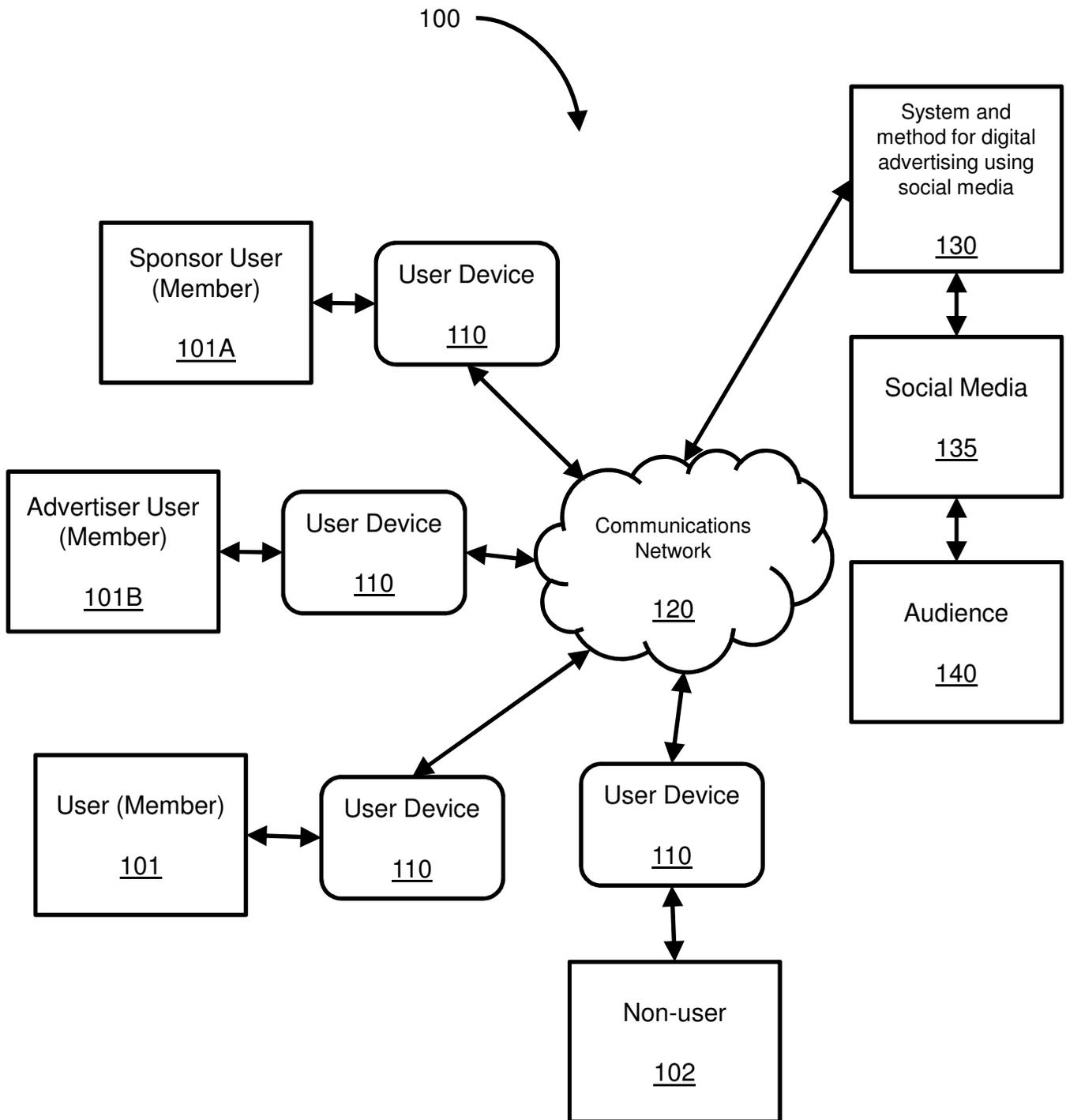
- Additional required and optional fields can be added to apply and/or register
- Non-users can register automatically without having to apply
- Non-users can login using their social media accounts via integrations such as Facebook Connect and/or the like
- Additional featured projects can be displayed and in more places throughout the system
- Featured project rankings can be based on alternative calculations using additional metrics
- Filtering and sorting can be based on alternative calculations using additional metrics
- Additional search criteria can be added to the search functionality
- More than one posting per social network can be enabled
- Additional social networks can be integrated with the system and method
- Budget earned for a social network posting can be customized based on user inputs
- Budget earned for a social network posting can include additional quantitative and/or qualitative measures from social media, sponsors, users, and/or the like
- Social media posts, users, projects, and system statistics can be refreshed automatically on a periodic basis in addition to user initiated refreshes
- Users can reload project statistics for projects that they are sponsoring in addition to projects that they are advertising
- Sponsor users can filter and/or sort how the advertising users and their posts are displayed
- Eligibility can be defined based on sponsor needs and/or advertiser user demographics, previous postings, and/or the like to permit and/or prevent eligibility to advertise specific projects
- Additional required and optional fields can be added to sponsor a project
- Users can be alerted when new projects are submitted, advertised, and/or the like

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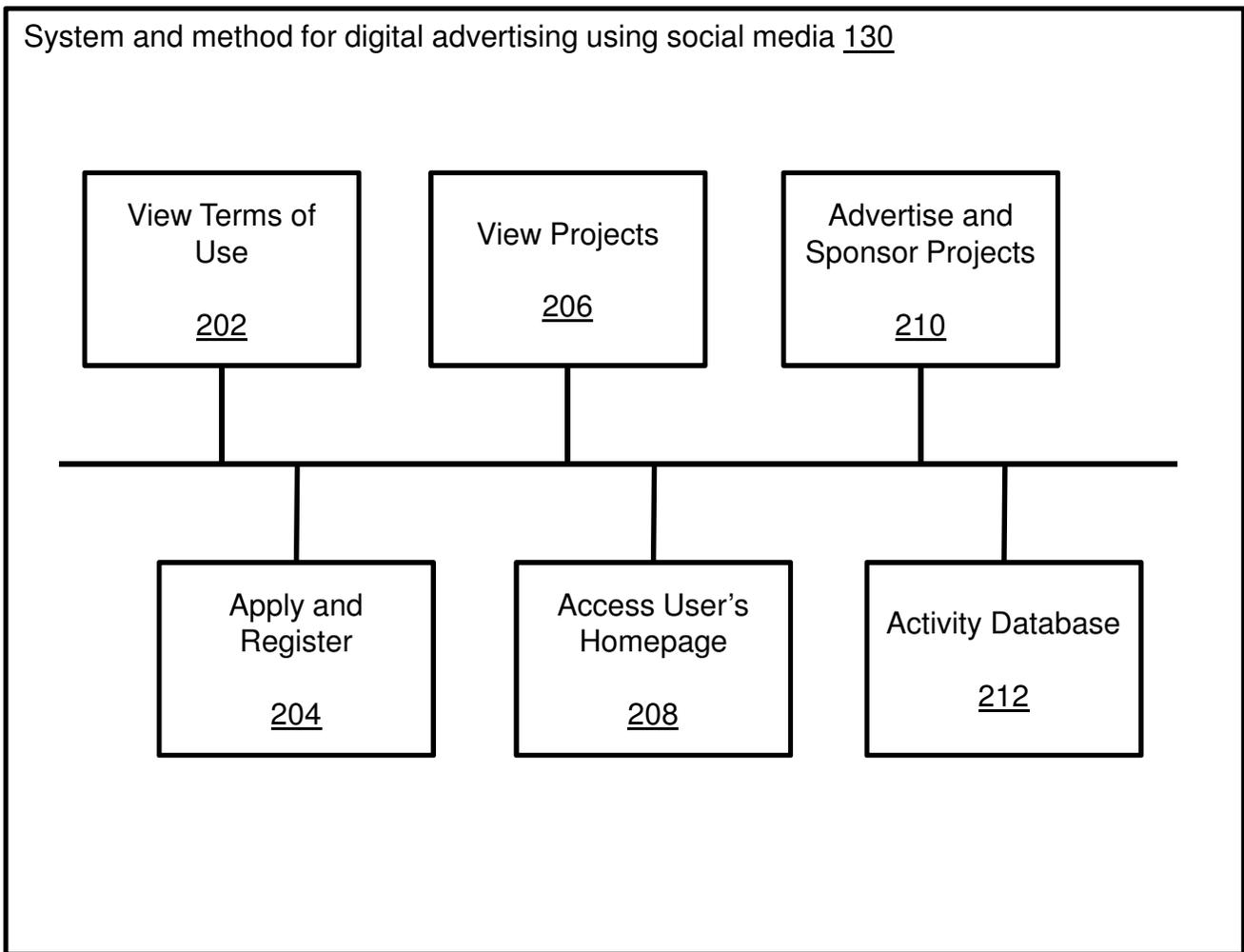
- Digital advertising posts can be limited to sponsor preferred media/audiences or expanded beyond social networking sites to any digital content that can be scraped by a web crawler and/or the like

In summary, the system and method **130** provides a more complete, end-to-end advertising experience enabling advertiser users **101B** to search for projects submitted by our sponsor users **101A**, generate digital advertising content for that project, submit valid **454** social media post URLs **540** associated with the project, associate the advertising content with the project to the benefit of sponsor users **101A**, advertiser users **101B**, and the advertisement's intended audience **140**, and earn project budget based on user inputs, quantitative, and/or qualitative measures from social media, sponsors, users, and/or the like.

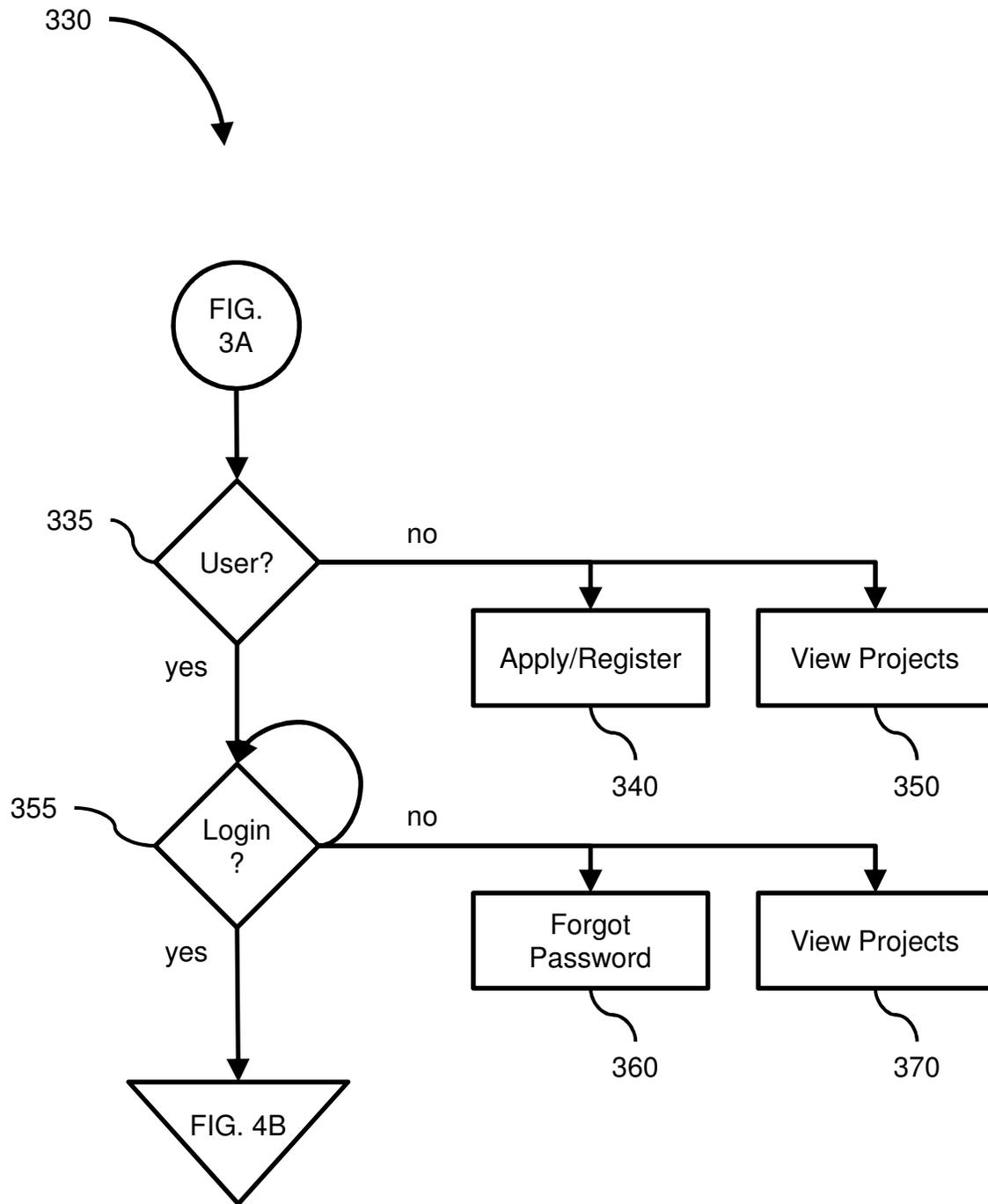
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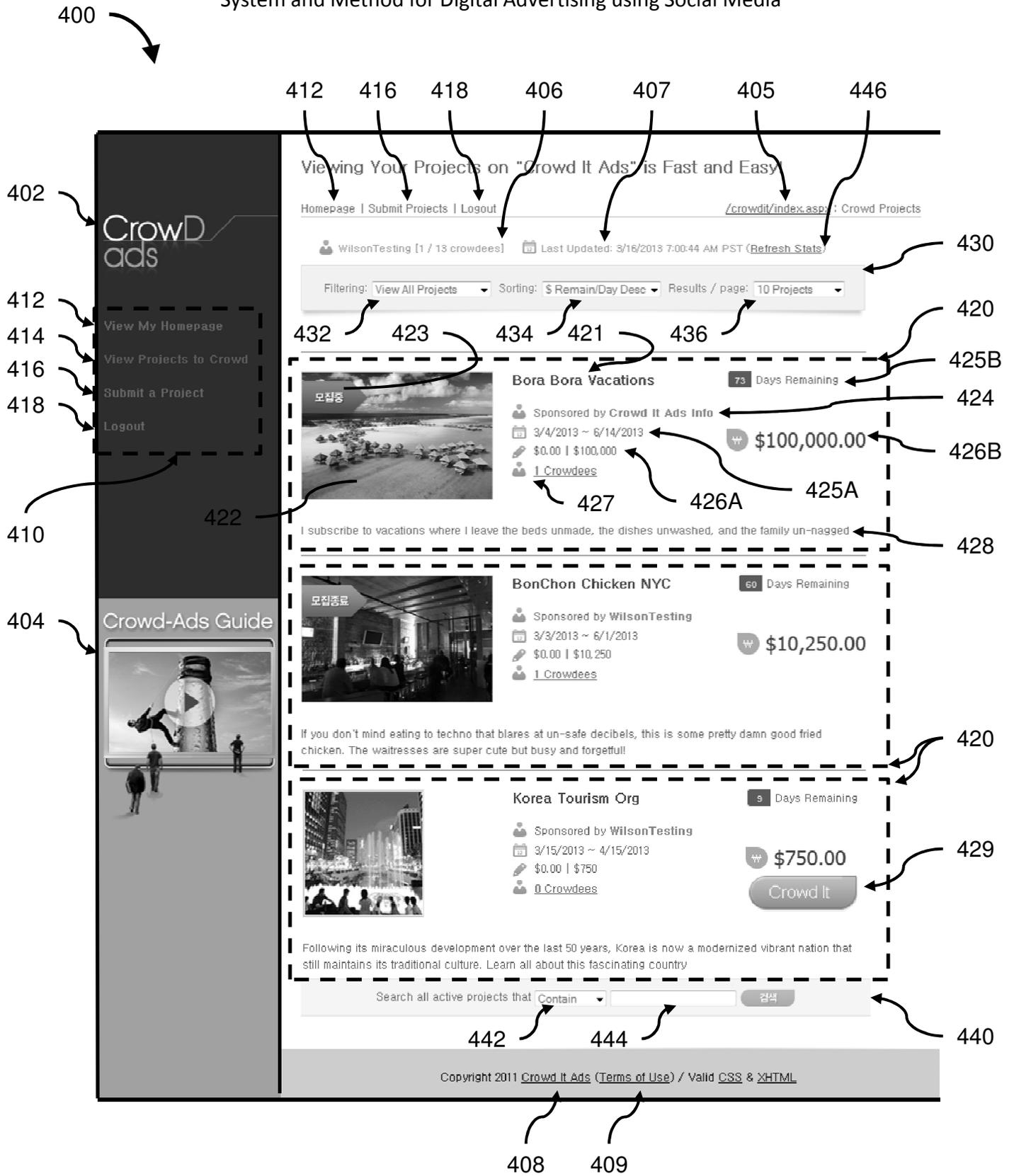
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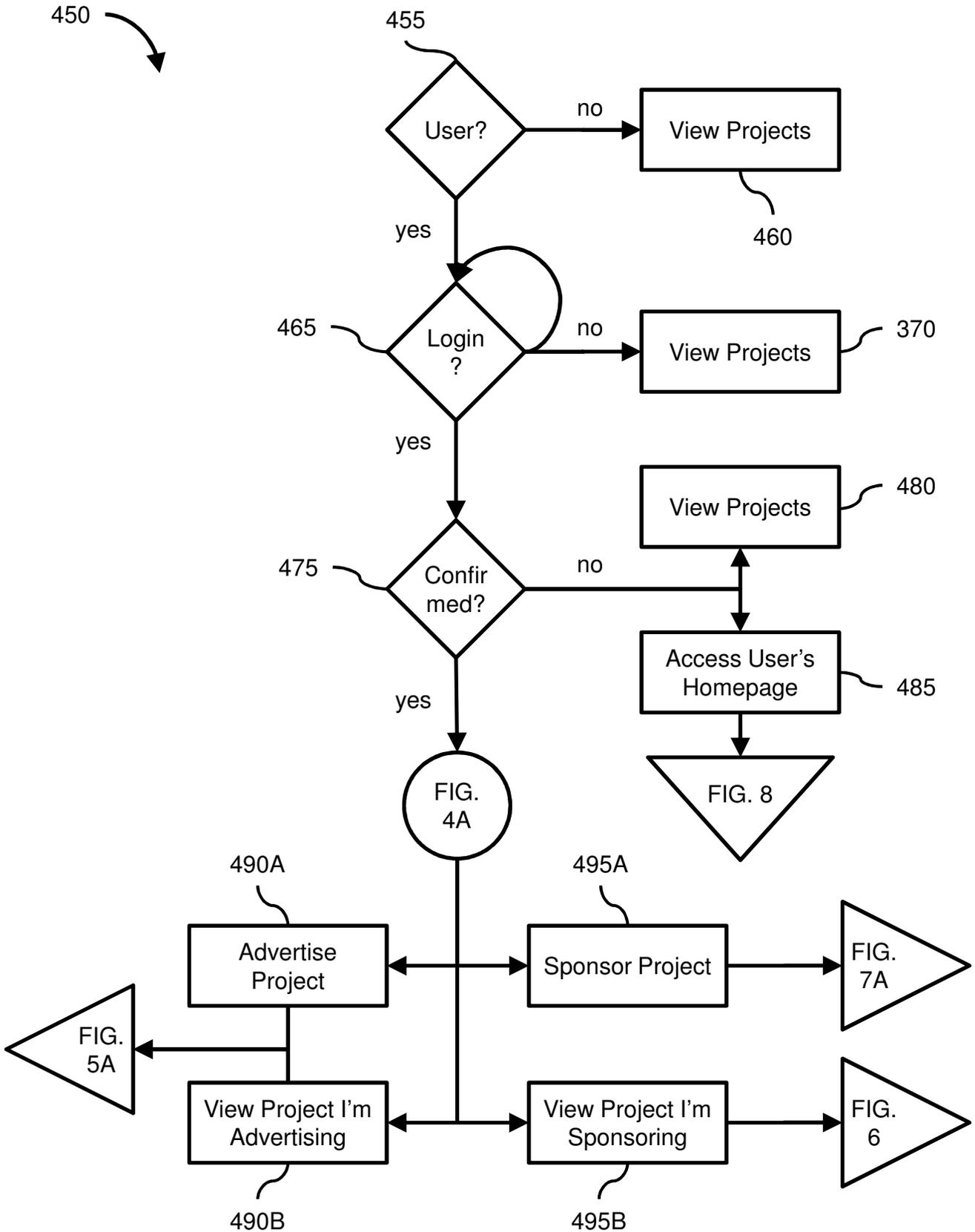




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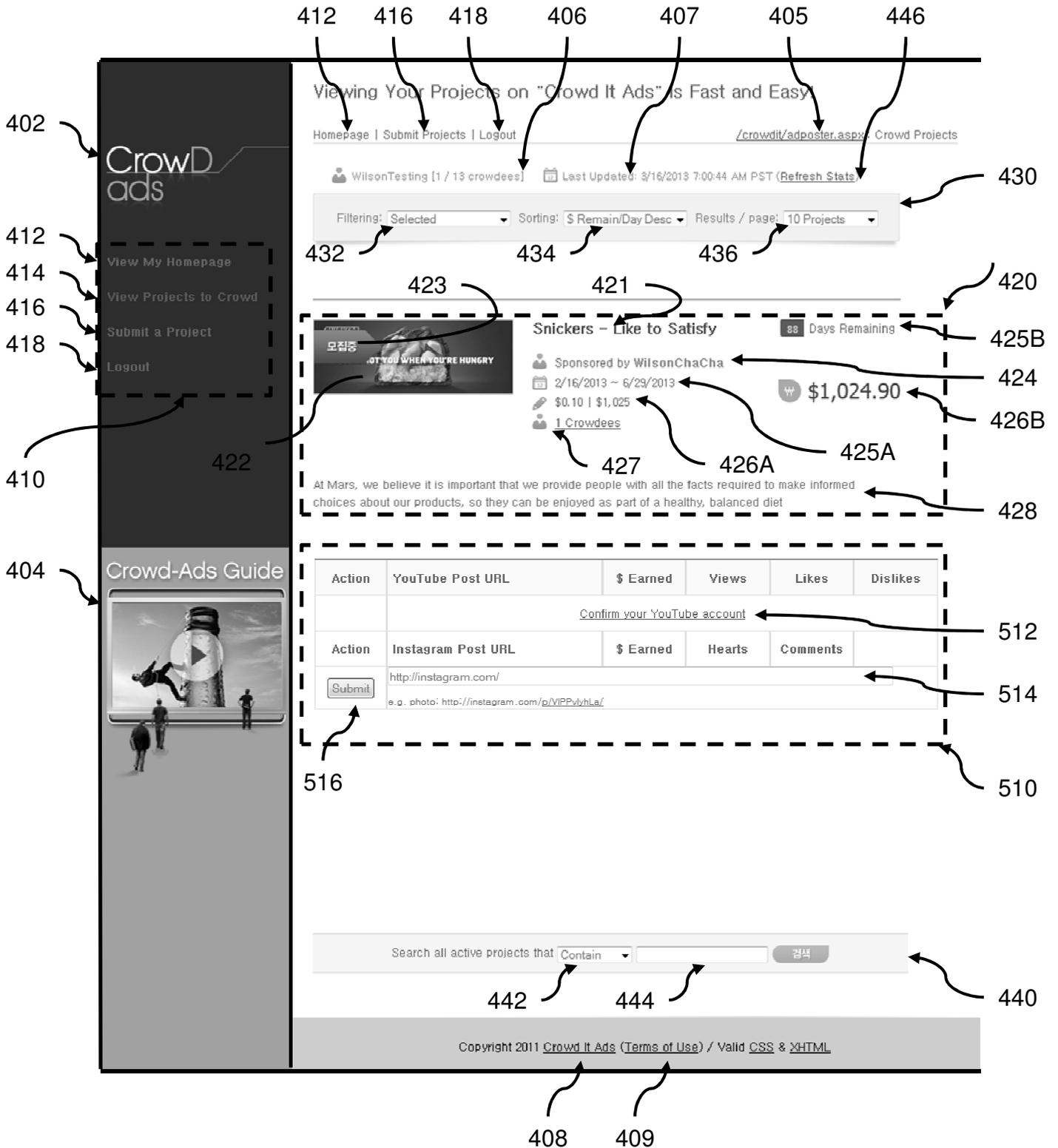


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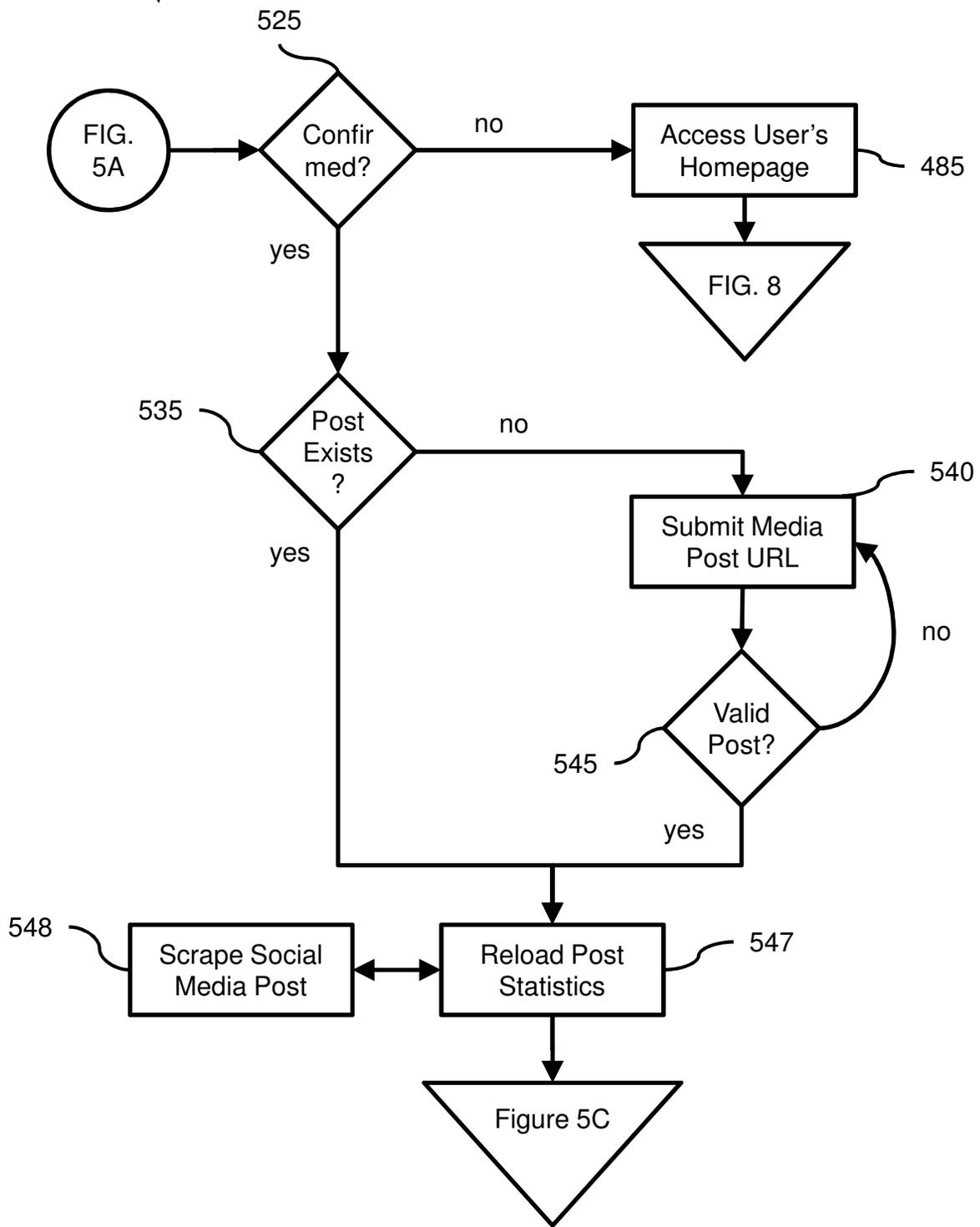


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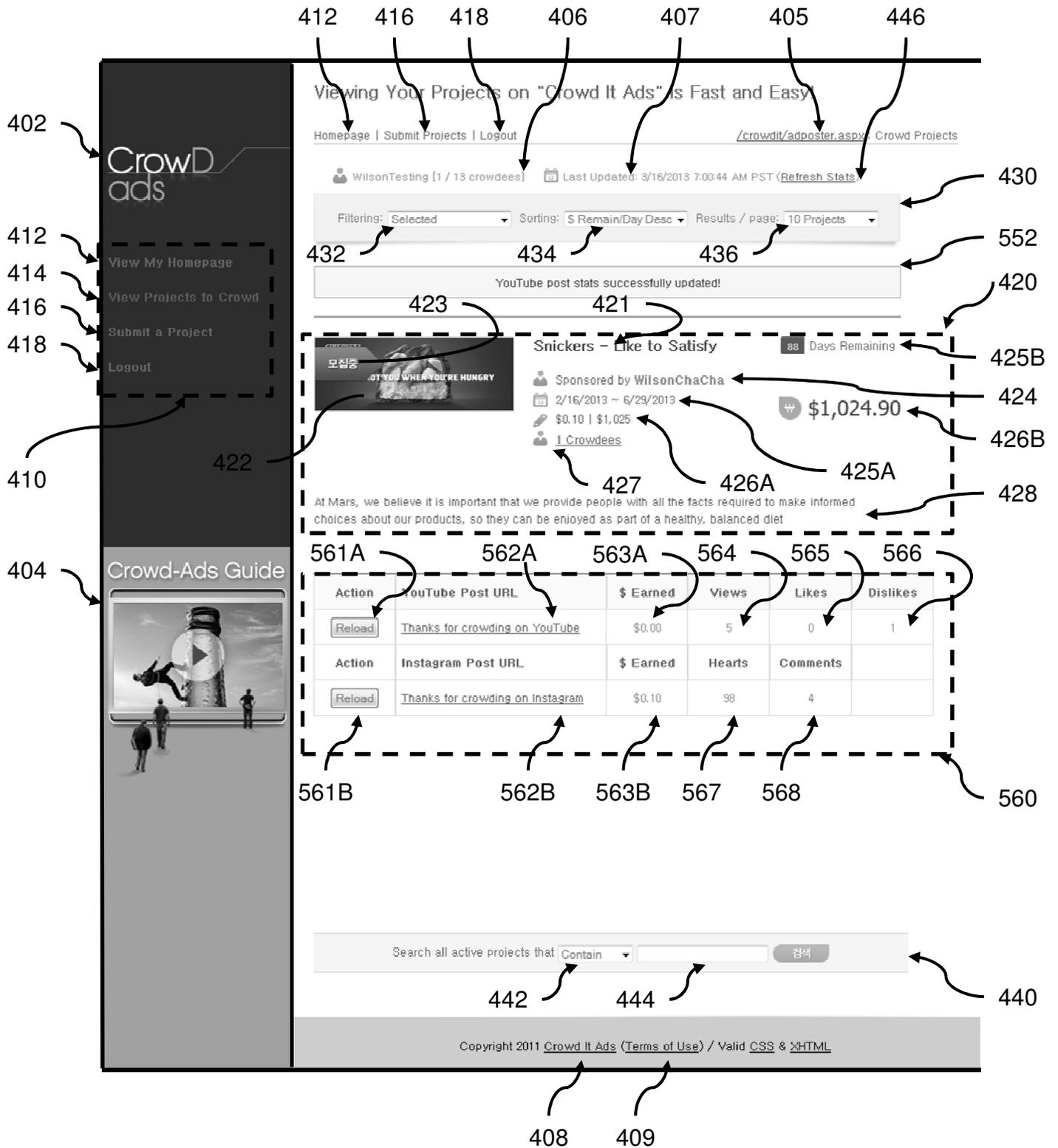
500



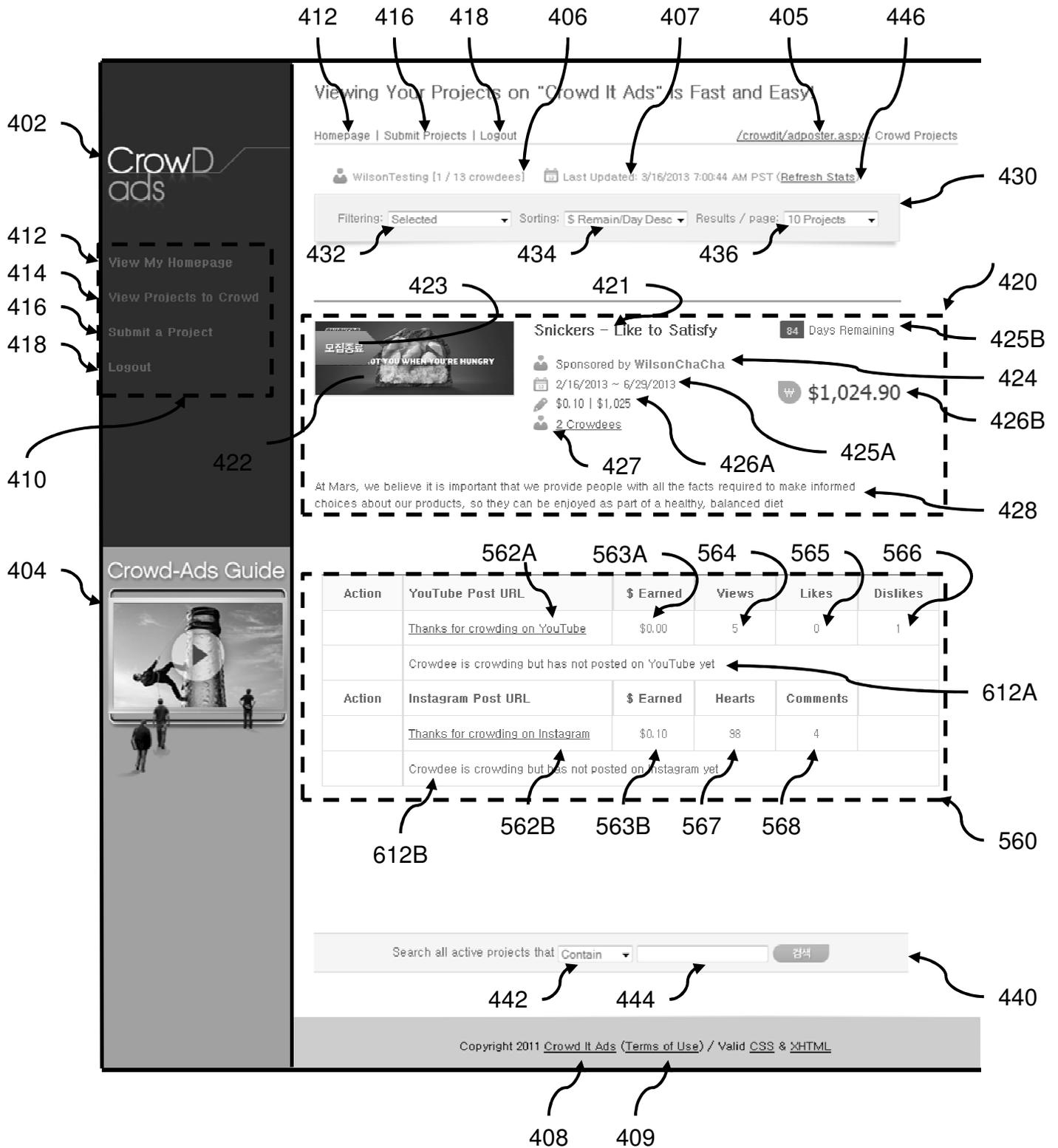
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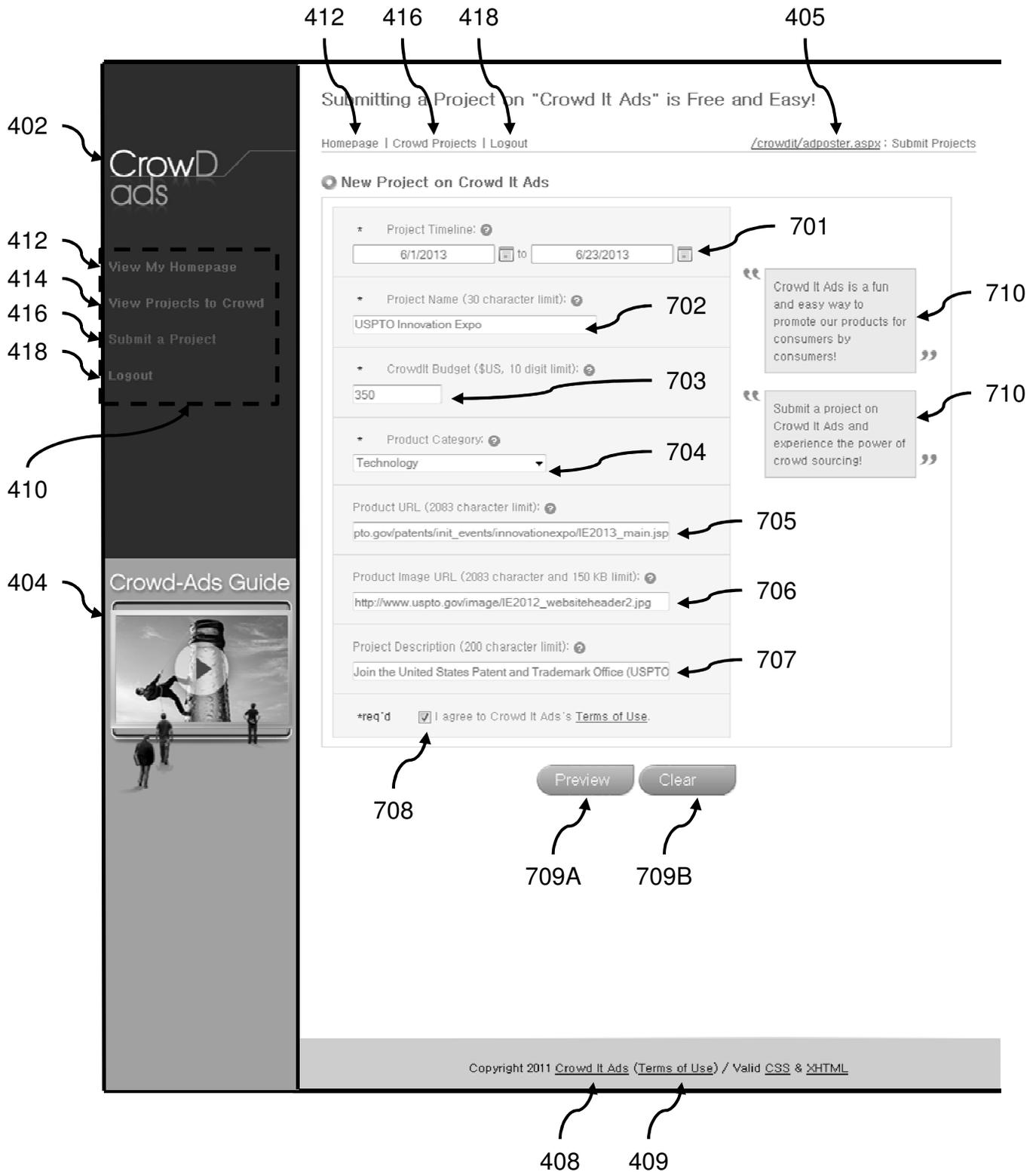
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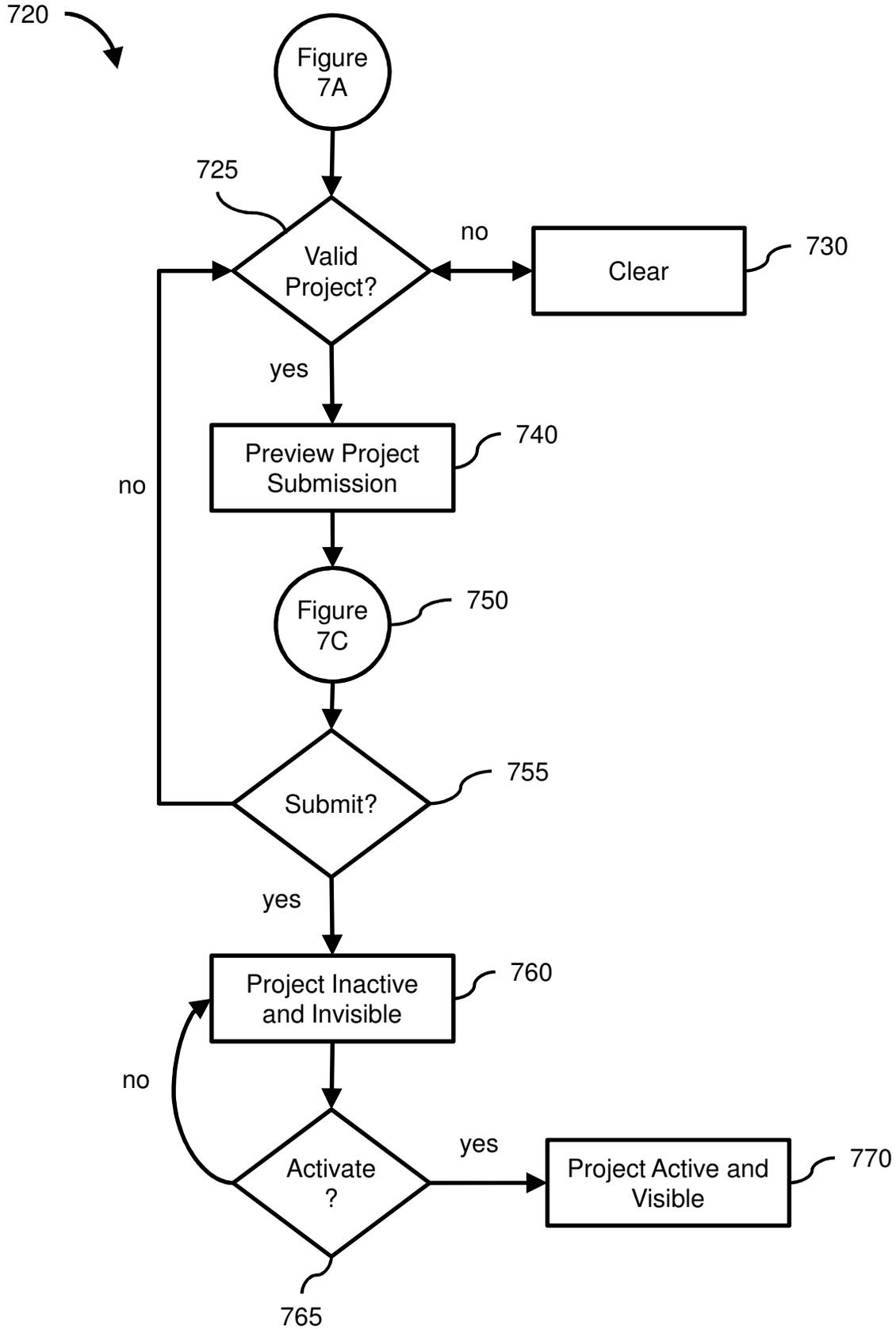


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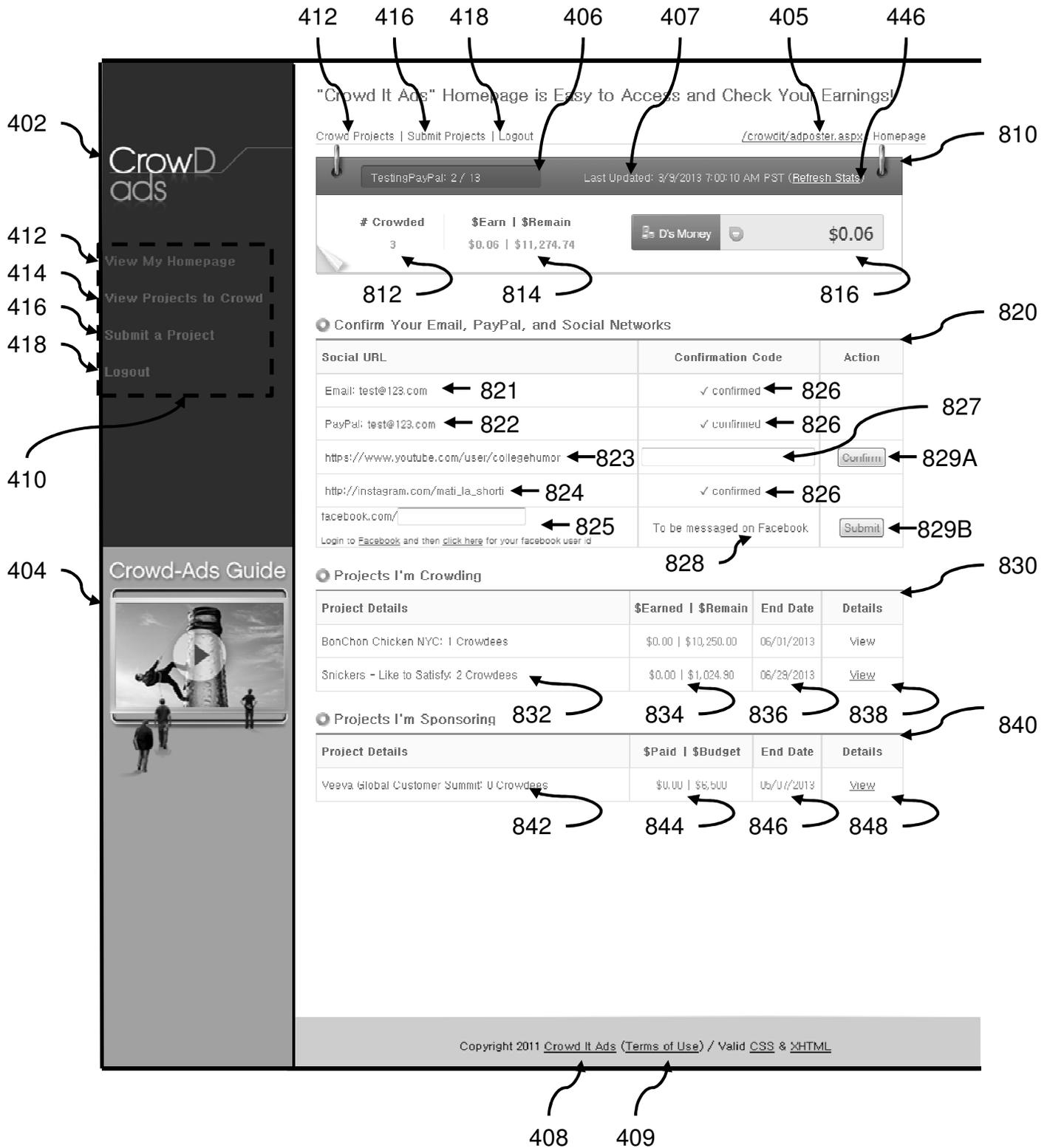
780

| General Information   |   |
|---|---|
| <b>Name</b>   | USPTO Innovation Expo ← 781   |
| <b>Category</b>   | technology ← 782  |
| <b>URL</b>  | http://www.uspto.gov/patents/init_events/innovationexpo/IE2013_main.jsp ← 783   |
| Financials  |   |
| <b>Budget (\$US)</b>  | \$350 ← 784   |
| <b>Timeline</b>   | 6/1/2013 ~ 6/23/2013 (22 days to Crowd) ← 785   |
| Details   |   |
| <b>Image</b>  |  This photo will be used as the project's thumbnail on search results ← 787       |
| <b>Description</b>  | Join the United States Patent and Trademark Office (USPTO) and the Smithsonian Institution in a celebration of ingenuity and cutting-edge patented technology ← 788 |
| <input type="button" value="Submit"/> ← 789                   |   |
| Please use your browser's back button to edit project details |   |

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