

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION**

CONVERGENT ASSETS LLC,

Plaintiff,

v.

THE HOME DEPOT, INC.,

Defendant.

C.A. No. 4:24-cv-739

JURY TRIAL DEMANDED

PATENT CASE

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Convergent Assets LLC, files this Original Complaint for Patent Infringement against The Home Depot, Inc. and would respectfully show the Court as follows:

I. THE PARTIES

1. Plaintiff Convergent Assets LLC (“Convergent Assets” or “Plaintiff”) is a Delaware limited liability company having an address at 1903 Toro Canyon Road, Austin, TX 78746.

2. On information and belief, Defendant The Home Depot, Inc. (“Defendant” or “Home Depot”) is a Delaware corporation and has a regular and established place of business in at 3901 Old Jacksonville Hwy, Tyler, TX 75701.

II. JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction of such action under 28 U.S.C. §§ 1331 and 1338(a).

4. On information and belief, Defendant is subject to this Court’s specific and general personal jurisdiction, pursuant to due process and the Texas Long-Arm Statute, due at least to its

business in this forum, including at least a portion of the infringements alleged herein at 3901 Old Jacksonville Hwy, Tyler, TX 75701, 411 E Loop 281 Longview, TX 75605, and many more.

5. Without limitation, on information and belief, Defendant has derived revenues from its infringing acts occurring within Texas. Further, on information and belief, Defendant is subject to the Court's general jurisdiction, including from regularly doing or soliciting business, engaging in other persistent courses of conduct, and deriving substantial revenue from goods and services provided to persons or entities in Texas. Further, on information and belief, Defendant is subject to the Court's personal jurisdiction at least due to its sale of products and/or services within Texas. Defendant has committed such purposeful acts and/or transactions in Texas such that it reasonably should know and expect that it could be haled into this Court as a consequence of such activity.

6. Venue is proper in this district under 28 U.S.C. § 1400(b). On information and belief, Defendant has a regular and established place of business in Texas at 3901 Old Jacksonville Hwy, Tyler, TX 75701, 411 E Loop 281 Longview, TX 75605, and many more. On information and belief, from and within this District, Defendant has committed acts of infringement, including at least a portion of the infringements at issue in this case.

7. For these reasons, personal jurisdiction exists and venue is proper in this Court under 28 U.S.C. § 1400(b).

III. COUNT I
(PATENT INFRINGEMENT OF UNITED STATES PATENT NO. 11,049,138)

8. Plaintiff incorporates the above paragraphs herein by reference.

9. On June 29, 2021, United States Patent No. 11,049,138 ("the '138 Patent") was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '138 Patent is attached hereto as Exhibit A and incorporated herein by reference.

10. Convergent Assets is the assignee of all right, title, and interest in the ‘138 patent, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the ‘138 Patent. Accordingly, Convergent Assets possesses the exclusive right and standing to prosecute the present action for infringement of the ‘138 Patent by Defendant.

11. The ‘138 Patent relates to the field of systems and methods for providing content that more closely matches a targeted user’s current specific interest associated with social networking activity. (Ex. A at 1:38-49; 3:23-36, 48-55; 4:16-18; 7:6-9, 12-16). The inventors recognized that the current methods of determining content for a particular user based on keywords listed on a webpage being viewed by the user failed to align the determined content with the current preferences or interests of the user. (*E.g., id.* at 1:38-49; 3:23-36, 48-55). The inventors therefore invented a sophisticated and improved method of using a computer that determines content for a targeted user by using social networking activity, recency of the content, ranking based on such information, and browsing information to determine what content to retrieve and provide to the user. (*E.g., id.* at 1:38-49; 4:51-57; 5:4-11; 24:17-37).

12. **Direct Infringement.** Upon information and belief, Defendant has been directly infringing and continues to infringe claim 28 of the ‘138 Patent in Texas, and elsewhere in the United States. As shown below, Defendant’s use and testing of <https://www.homedepot.com/> (“Accused Instrumentality”) performs the claimed method and infringes claim 28. Home Depot obtains first data indicating words in content associated with social networking activity, including user posts on social networking sites. For example, Home Depot obtains information from social media platforms and shares users’ information with advertising partners. Home Depot collects data

from digital resources, such as social media, and tracks users' social media activities. Home Depot obtains and analyzes large volumes of customer data, including social media posts.

How Do We Collect Information?

We collect information from affiliates and third parties. This includes shipping companies, installers, service providers, social media platforms, and more.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance#WhatInformationDoWeCollect>).

The Home Depot collects data from digital resources, such as its website, promotional emails and social media, and uses that information to drive traffic to stores and better target its advertising and marketing efforts.

(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

Home Depot recognizes the importance of understanding customer needs and providing personalized service. With the help of NLP, Home Depot can analyze large volumes of customer data, including social media posts, online reviews, and customer service interactions, to gain valuable insights into customer preferences and trends.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

Home Depot is leveraging data collected from its digital retail and communication platforms, and social media as well to understand customers' needs and preferences, provide better products, customize recommendations, enhance their experience, and design targeted marketing programs. The company uses Adobe Experience Cloud and Adobe Experience Platform, a cloud-based big data architecture that helps to gather and analyze consumer behavior, profile, and segment customers, and stay updated on their expectations.

(E.g., <https://www.globaldata.com/store/report/home-depot-enterprise-tech-analysis/>).

We disclose or share your information with advertising and marketing partners to manage and deliver advertising and understand your preferences. We may disclose or share information that does not directly identify you (such as your device identifier, IP address, or other information associated with your online browsing activities) with select third parties for their and our advertising and marketing efforts.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance#WhatInformationDoWeCollect>).

We collect information from affiliates and third parties. This includes shipping companies, installers, service providers, social media platforms, and more.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance>).

Data's Relationship to Marketing Spend

Because it has more ways to track metrics through digital means, such as social media analytics,

(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

What Information Do We Collect?

We collect your information to provide the most seamless and personalized shopping experience possible. Here are examples of the information we collect:

Internet activity, including browsing history, search history, and information about your activities when using our in-store WiFi.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance#WhatInformationDoWeCollect>).

The home improvement retailer is giving suppliers an inside look at consumer insights, business strategies and a road map for a growing ad channel at its first “InFronts” event.

(E.g., <https://www.marketingdive.com/news/home-depot-orange-apron-retail-media-network-infronts/711240/>).

Where Do We Collect It From?

- Social media
platforms.

Why Do We Collect and Disclose It?

- Personalizing digital
content.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

13. Defendant (via the Accused Instrumentality) performs the step of generating second data indicating an association between first words of the indicated words and indicating a degree of the association, the degree of the association corresponds to a ranking based on a recency of the content, wherein a first ranking of a first degree of association is greater than a second ranking of a second degree of association based on the multiple words related to the first degree of association having a more recent content relationship than the multiple words related to the second degree of association. For example, Home Depot generates second data based on first words (*i.e.*, words in social media content) and the degree of association of the contents (*i.e.*, similar categorical data). The degree of association indicates how related a set of words is to each other. The degree of association corresponds to a ranking or item arrangement based on the recency of the content, where the ranking of the first degree of association is greater than the ranking of the second degree of association. This is based on multiple words related to word association having more recent content relationships than multiple words related to the second degree of association. A screenshot below indicates how Home Depot uses machine learning and natural language processing techniques to generate data, *i.e.*, to generate/update retail-related product offerings based on online browsing and social media analytics. Home Depot ranks product items based on relevance scores,

categorical matching, and the latest trends. For example, a product with a significant relevance score is ranked higher than one with a lesser relevance score. The below screenshots show that Home Depot personalizes digital content data based on social media, and that Home Depot updates or introduces product inventories based on information received from social media platforms or social media analytics. Additionally, Home Depot uses natural language processing algorithms to analyze social media conversations and stay updated on trends, enhancing their product offerings and marketing strategies and organizes a variety of products into categories and options within those categories, grouping similar items together and then groups products into text based on categorical matching (*e.g.*, words grouped into categories like colors or brands), semantic analysis (*i.e.*, measuring word meaning similarity), and relevance scores. Further, Home Depot analyzes current trends and the recency of content to generate retail-related product offerings based on social media data, strategically organizing or ranking the products and prioritizing search results based on the item pair relevance score. Moreover, Home Depot's dynamic content monitoring, includes social trends, customer trends, and marketing strategy, to deliver personalized retail-related products on its website.

Why Do We Collect and Disclose It?

Improving our
products and
services, including
improving store
layouts and digital
content.

Personalizing digital
content.

Where Do We Collect It From?

Social media
platforms.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

What Do We Collect?

We collect personal information when you visit our stores, when you contact us, when you interact with or use our digital offerings, and from business partners and other third parties.

we collect information from a variety of third parties.

For example, we collect information from:

- Social media platforms

Here are some examples of how we use the information we collect:

- Personalizing the content on our digital services (e.g., websites, mobile applications, and connected device applications) so you have a consistent experience
- Recommending products and services that may interest you
- Identifying your interests based on your interactions with us and information we have received from third parties or publicly available sources
- Updating our product inventories to meet projected demand

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

Trend Analysis and Forecasting

Home Depot employs NLP algorithms to analyze online conversations and social media trends related to home improvement. This analysis helps the company stay ahead of emerging trends and make data-driven decisions regarding product offerings and marketing strategies.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

HOW HOME DEPOT ANALYZES AND USES CUSTOMER DATA

Data's Relationship to Marketing Spend

Because it has more ways to track metrics through digital means, such as social media analytics

The Home Depot collects data from digital resources, such as its website, promotional emails and social media, and uses that information to drive traffic to stores and better target its advertising and marketing efforts.

(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

Product assortment: Home Depot boasts an extensive range of home improvement products, from tools and hardware to appliances and décor. This breadth of offerings appeals to a broad customer base, enabling Home Depot to cater to a wide range of project needs. Whether customers are looking to renovate their kitchen, upgrade their bathroom, or enhance their outdoor living space, Home Depot has the products they need to bring their vision to life.

(E.g., <https://www.marstudio.com/blog/2024/01/home-depot-marketing-strategy/>).

Measure Search Relevance for Home Depot Products

(E.g., <https://billy-inn.github.io/papers/cmput690.pdf>).

The key to this competition was mostly preprocessing and feature engineering as the primary data is text. Our processed text features can broadly be grouped into a few categories: categorical features, counting features, co-occurrence features, semantic features, and statistical features.

- Categorical features: Put words in categories such as colors, units, brands, core. Count the number of those words in the query/title and count number of intersection between query and title for each category.
- Counting features: Length of query, number of common grams between query and title, Jacquard similarity, etc.
- Co-occurrence features: Measures of how frequently words appear together. e.g., Latent Semantic Analysis (LSA).
- Semantic features: Measure how similar the meaning of two words is.
- Statistical features: Compare queries with unknown score to queries with known relevance score.

(E.g., <https://medium.com/kaggle-blog/home-depot-product-search-relevance-winners-interview-2nd-place-thomas-sean-qingchen-nima-68068f9f9ffd>).

Trend Analysis and Forecasting

Home Depot employs NLP algorithms to analyze online conversations and social media trends related to home improvement. This analysis helps the company stay ahead of emerging trends and make data-driven decisions regarding product offerings and marketing strategies.

Home Depot recognizes the importance of understanding customer needs and providing personalized service. With the help of NLP, Home Depot can analyze large volumes of customer data, including social media posts, online reviews, and customer service interactions, to gain valuable insights into customer preferences and trends.

Home Depot harnesses the power of NLP across various aspects of its operations, leveraging customer feedback sentiment analysis, product review analysis, automated customer queries handling, optimized inventory management, competitor analysis, efficient email classification, customer churn prediction, optimized online search results, trend analysis, and forecasting. By implementing NLP technologies, Home Depot enhances customer experience, improves decision-making, and maintains a competitive edge in the ever-evolving home improvement retail industry.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

Home Depot understands the importance of visual merchandising in capturing customers' attention and inspiring them to envision their ideal living spaces. By strategically arranging products and creating visually appealing displays, Home Depot helps customers visualize the possibilities and encourages them to make purchases.

(E.g., <https://www.marstudio.com/blog/2024/01/home-depot-marketing-strategy/>).

The training and test sets both contain search/product pairs and their corresponding relevance scores. The relevance score is between 1 (not relevant) to 3 (perfect match). A score of 2 represents partially or somewhat relevant.

(E.g., <https://cs224d.stanford.edu/reports/ChenXiong.pdf>).

Objective: For every given (search-query, product), predict the relevance score. This will be posed as a regression problem as it will be easier for us to rank the products.

(E.g., <https://towardsdatascience.com/modeling-product-search-relevance-in-e-commerce-home-depot-case-study-8ccb56fbc5ab>).

Home Depot is not just a home improvement retailer; it is a recognized brand with a marketing strategy that has made it a retail giant. This article will delve into Home Depot's marketing approach, examining the key elements contributing to its success. It will also explore the impact of digital marketing on Home Depot's growth and its in-store marketing techniques. Finally, it will discuss the future of Home Depot's marketing strategy and the steps it is taking to adapt to changing consumer behavior, incorporate sustainability, and leverage technological innovations.

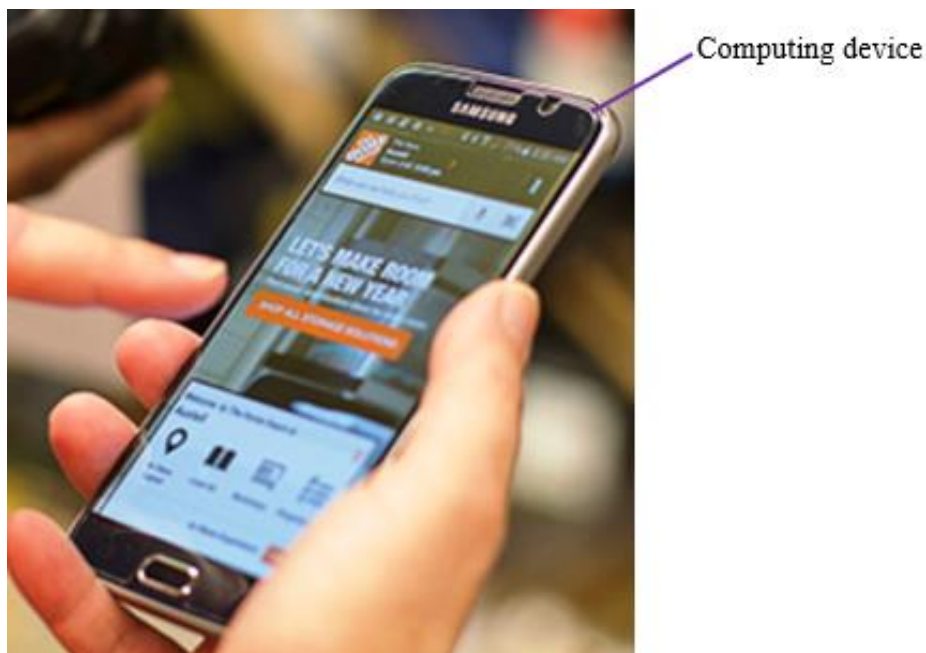
Adapting to Changing Consumer Behavior

Home Depot closely monitors consumer trends and preferences to ensure it consistently delivers products and experiences that align with customer expectations. By staying attuned to shifting demographics, lifestyles, and consumption patterns, Home Depot remains relevant and responsive to customer needs.

(E.g., <https://www.marstudio.com/blog/2024/01/home-depot-marketing-strategy/>).

14. As shown below, Defendant (via the Accused Instrumentality) performs the step of identifying, at a computing system, a word in browse information of a target user device, a second word determined based on the second data to be related to the word, and a content item having an associated keyword that corresponds to the second word. Evidence demonstrates a process carried out by a computing system (*i.e.*, mobile computing system) to identify words in the browsing information of any target user device (*e.g.*, understanding raw search queries of mobile). Home Depot determine product recommendations (*e.g.*, retail-related product keywords) by analyzing social media data in real-time with NLP and machine learning techniques. This data can include social media posts, online conversations, current social trends, and the user's online browsing behavior. Home Depot displays personalized content with contextual similarity and semantic insights (*e.g.*, related keywords from words associated with social media text and visual analytics). Screenshot demonstrates Home Depot's capability to understand a user's search query raw text and predict related word suggestions/recommendations based on the user's internet activity, including online browsing data and social media. It identifies relevant content items and provides personalized word recommendations related to the user's internet activity and current social trends. As shown in information below, Home Depot recommends products formulated from word suggestions. Home Depot determines the second word (*i.e.*, word recommendations based on

product offerings relevant to user's social media), assessing or identifying users' online browsing activities for their advertising and marketing strategies and provides users with personalized product suggestions/ recommendations (*e.g.*, related product word suggestions) based on their online browsing data and identifies search query items and effectively predicts desired product/ content data by utilizing machine learning, NLP, and information retrieval techniques. Further, the Home Depot product search relevance (*i.e.*, it can predict related word suggestions) and offers suggestions and recommendations (*i.e.*, the second word) based on users' online browsing history and NLP techniques applied to users' social media data with search relevance techniques, involving the understanding of search queries to deliver personalized recommendations, using natural language processing techniques to identify and interpret customer search queries, ensuring that customers quickly find relevant products. Moreover, Home Depot has search relevancy prediction (*e.g.*, relevant product word suggestions), optimizing product inventory based on NLP techniques, and utilizing NLP techniques to analyze customer preferences and offer personalized recommendations.



(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

The Home Depot mobile app allows customers to browse products, check inventory availability, and make purchases directly from their smartphones. This eliminates the need for customers to visit physical stores, saving them time and effort. The app also provides users with personalized recommendations based on their browsing and purchase history, ensuring a tailored shopping experience.

(E.g., <https://www.marstudio.com/blog/2024/01/home-depot-marketing-strategy/>).

We disclose or share your information with advertising and marketing partners to manage and deliver advertising and understand your preferences. We may disclose or share information that does not directly identify you (such as your device identifier, IP address, or other information associated with your online browsing activities) with select third parties for their and our advertising and marketing efforts.

(E.g., <https://robots.net/fintech/how-Home-Depot-uses-big-data/>).

Social media and mobile big data analytics can help understand customer behavior: Walmart uses social media and mobile big data analytics to understand customer behavior and preferences. By analyzing social media data, Walmart can identify trends and respond to customer needs quickly. The company also uses mobile big data analytics to provide personalized recommendations to customers and improve their shopping experience.

Walmart's big data analytics journey provides valuable insights into how big data can be leveraged to improve customer experience and increase sales. By analyzing data in real-time, Walmart was able to optimize its supply chain management, improve product availability, and provide personalized recommendations to customers. As big data continues to grow in importance, companies like Walmart will need to continue to innovate and leverage big data analytics to stay competitive in the market.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance>).

Internet Activity

What Information Does This Include?

Browsing history, search history, information about your interaction with our websites, applications, electronic communications, or advertisements, and information about your activities when using our in-store WiFi. Session replay software may be used to record and replay your interaction.

Where Do We Collect It From?

- Social media platforms.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

The Home Depot mobile app allows customers to browse products, check inventory availability, and make purchases directly from their smartphones. This eliminates the need for customers to visit physical stores, saving them time and effort. The app also provides users with personalized recommendations based on their browsing and purchase history, ensuring a tailored shopping experience.

(E.g., <https://www.marstudio.com/blog/2024/01/home-depot-marketing-strategy/>).

Everything is moving to digitalization and so is the shopping experience. E-commerce has been on rapid growth over the past few years and hence, online product search has become one of the most important factors in providing the customer with a satisfying shopping experience. In this blog, I propose a robust way of predicting the desired products for a given search query, using techniques involving machine learning, natural language processing, and information retrieval.

Predict the relevance of search results on homedepot.com using Machine Learning

(E.g., <https://towardsdatascience.com/modeling-product-search-relevance-in-e-commerce-home-depot-case-study-8ccb56fbc5ab>).

One area where NLP has greatly benefited Home Depot is customer service. By leveraging NLP-powered chatbots, Home Depot can provide real-time assistance to customers, answering questions and offering suggestions and recommendations. These chatbots can understand and interpret natural language queries, allowing customers to interact with Home Depot's system more naturally and intuitively.

In addition to customer service and feedback analysis, NLP has also enabled Home Depot to enhance its product recommendation system. By analyzing customer preferences, past purchases, and browsing history, NLP algorithms can recommend relevant products to customers, increasing the likelihood of upselling and cross-selling opportunities.

NLP-powered product recommendations enhance the customer shopping experience by suggesting relevant products based on individual preferences and needs

Home Depot recognizes the importance of understanding customer needs and providing personalized service. With the help of NLP, Home Depot can analyze large volumes of customer data, including social media posts, online reviews, and customer service interactions, to gain valuable insights into customer preferences and trends.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

Home Depot has a mature data science organization with world-class data scientists that came from top schools and research labs. This organization leverages different aspects of data science to solve challenging problems like search relevancy, query understanding, personalized recommendations.

(E.g., <https://www.forbes.com/sites/cognitiveworld/2020/10/17/how-home-depot-is-enhancing-the-ecommerce-experience-with-ai/>).

Optimized Online Search Results

Using NLP, Home Depot improves its online search functionality by understanding and accurately interpreting customer search queries. This ensures that customers find relevant products quickly and enhances their overall shopping experience.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

High-quality search is all about returning relevant results even when the data is changing or poorly structured, the queries are imprecise. Here is we are going to do today: Given only raw text as input, our goal is to predict the relevancy of products to search results at the Home Depot website, as a result, help them improve their customers' shopping experience. Let's get started!

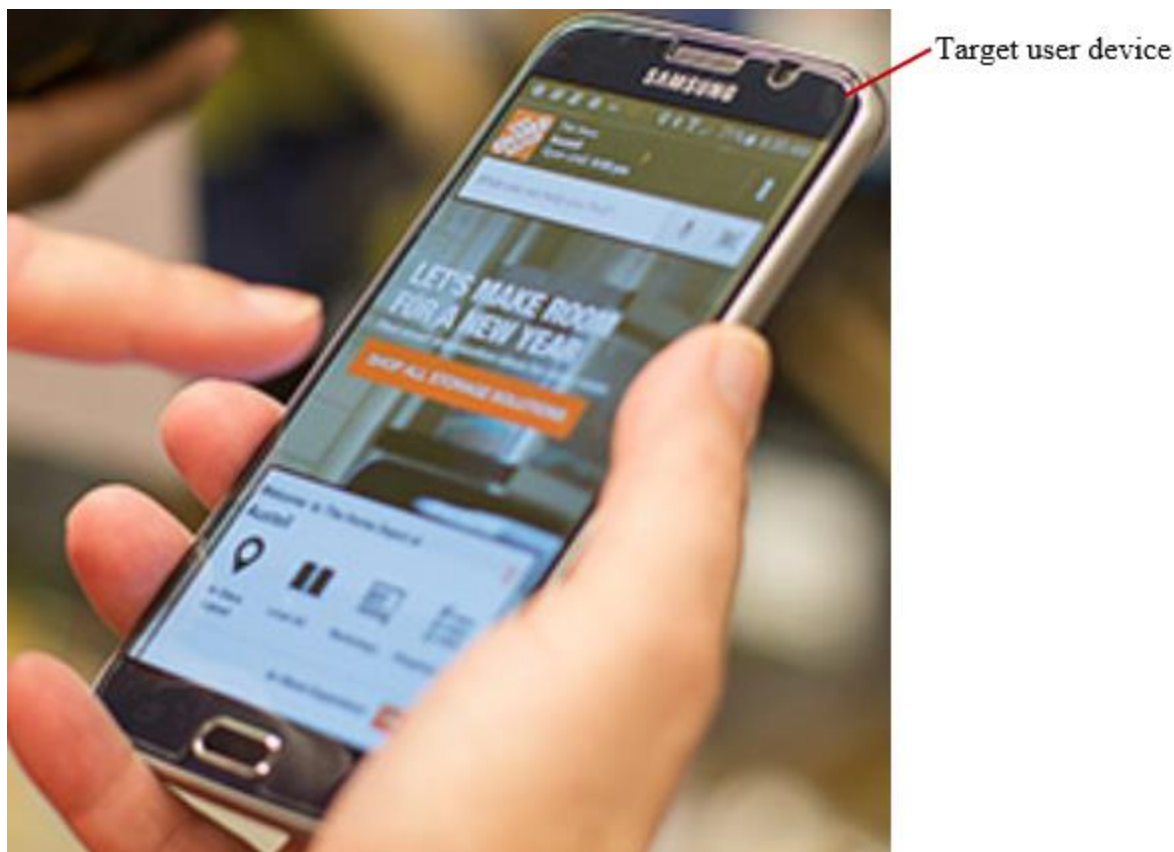
(E.g., <https://towardsdatascience.com/predict-search-relevance-using-machine-learning-for-online-retailers-5d3e47acaa33>).

Home Depot harnesses the power of NLP across various aspects of its operations, leveraging customer feedback sentiment analysis, product review analysis, automated customer queries handling, optimized inventory management, competitor analysis, efficient email classification, customer churn prediction, optimized online search results, trend analysis, and forecasting. By implementing NLP technologies, Home Depot enhances customer experience, improves decision-making, and maintains a competitive edge in the ever-evolving home improvement retail industry.

NLP algorithms analyze customer preferences and offer personalized recommendations.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

15. Defendant (via the Accused Instrumentality) performs the step of providing a portion of the content item (*i.e.*, personalized contents) retrieved from a data repository to the target user device (such as mobile device). For example, Home Depot collects, analyzes, and retrieves data from various sources, such as social platforms, users' online browsing and search activities, engagement metrics, and users' preferences, to provide personalized product recommendations and deals to the target user device, such as a mobile phone.



(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

We advertise to you, including supporting targeted advertising for select third parties and sending you promotions, newsletters, and information from other select companies we think you might find interesting.

What Information Do We Collect?

Demographic information, including age, race, ethnicity, and gender.

Internet activity, including browsing history, search history, and information about your activities when using our in-store WiFi.

Inferences, including preferences, interests and other characteristics.

We collect information from affiliates and third parties. This includes shipping companies, installers, service providers, social media platforms, and more.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance#WhatInformationDoWeCollect>).

Internet Activity

What Information Does This Include?

Browsing history, search history, information about your interaction with our websites, applications, electronic communications, or advertisements, and information about your activities when using our in-store WiFi. Session replay software may be used to record and replay your interaction.

Where Do We Collect It From?

- Social media platforms.

Why Do We Collect and Disclose It?

- Learning about customer trends and interests.
- Personalizing digital content.
- Delivering marketing communications and advertising.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

Commercial Information

What Information Does This Include?

Products or services purchased, purchasing history, products or services you like, reviews you submit, or where you shop.

Where Do We Collect It From?

- Social media platforms.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

Demographic Information

What Information Does This Include?

Age, race, ethnicity, and gender.

Where Do We Collect It From?

- Social media platforms.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

Our Tracking Tools

In order to collect your information online, we use digital tracking tools, including cookies and web beacons. The third-party companies we partner with might also use tracking tools on their web properties. You can control our tracking tools by disabling browser cookies and flash cookies.

Web beacons and pixels, which collect information about how you interact with content.

Make product recommendations and provide advertising content

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-at-a-glance#WhatInformationDoWeCollect>).

The Home Depot collects data from digital resources, such as its website, promotional emails and social media, and uses that information to drive traffic to stores and better target its advertising and marketing efforts.

(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

Home Depot recognizes the importance of understanding customer needs and providing personalized service. With the help of NLP, Home Depot can analyze large volumes of customer data, including social media posts, online reviews, and customer service interactions, to gain valuable insights into customer preferences and trends.

(E.g., <https://nlpstuff.com/nlp-home-depot/>).

Data's Relationship to Marketing Spend

Because it has more ways to track metrics through digital means, such as social media analytics

(E.g., <https://hardwareretailing.com/how-home-depot-analyzes-uses-customer-data/>).

Everything is moving to digitalization and so is the shopping experience. E-commerce has been on rapid growth over the past few years and hence, online product search has become one of the most important factors in providing the customer with a satisfying shopping experience. In this blog, I propose a robust way of predicting the desired products for a given search query, using techniques involving machine learning, natural language processing, and information retrieval.

(E.g., <https://towardsdatascience.com/modeling-product-search-relevance-in-e-commerce-home-depot-case-study-8ccb56fbc5ab>).

Moreover, Home Depot's social media presence allows the brand to stay connected with its customers in real-time. The company responds to customer inquiries, addresses concerns, and provides personalized recommendations, creating a sense of trust and loyalty among its followers.

Recognizing the increasing prevalence of mobile usage, Home Depot has developed a mobile app that offers convenient features such as product search, in-store navigation, and personalized recommendations. By leveraging mobile marketing, Home Depot extends its reach and provides customers with a seamless shopping experience, both online and in-store.

In addition to online shopping, the mobile app enhances the in-store experience by offering features like in-store navigation. Customers can easily locate products within the store, making their shopping trips more efficient. The app also provides access to exclusive deals and promotions, incentivizing customers to visit physical stores and engage with the brand.

(E.g., <https://www.marstudio.com/blog/2024/01/home-depot-marketing-strategy/>).

Home Depot's marketing strategy extends beyond providing great products and experiences. The company understands the power of emotional storytelling in advertisements and the value of data-driven personalized marketing.

Utilizing Data-Driven Personalized Marketing

Home Depot leverages customer data to deliver personalized marketing messages and offers. By analyzing customer preferences and purchase history, the company can tailor its marketing efforts to individual customers, ensuring that they receive relevant promotions and recommendations.

(E.g., <https://www.brandcredential.com/post/unveiling-home-depots-winning-marketing-strategy>).

The Home Depot, Inc. Privacy & Security Statement

we collect, use, and disclose personal information.

We do so to process and fulfill your orders, to improve our in-store and digital offerings

Why Do We Collect and Disclose It?

- Personalizing digital content.
- Delivering marketing communications and advertising.

(E.g., <https://www.homedepot.com/privacy/privacy-and-security-statement>).

In today's digital age, Home Depot recognizes the importance of engaging customers through online channels. The company leverages digital platforms to deliver personalized content, offer easy online ordering and delivery options, and provide access to helpful resources such as how-to guides and instructional videos.

(E.g., <https://www.brandcredential.com/post/unveiling-home-depots-winning-marketing-strategy>).

16. **Induced Infringement.** Defendant has also actively induced, and continues to induce, the infringement of at least claim 28 of the '138 Patent by actively inducing its customers to use Defendant's <https://www.homedepot.com/> product, including <https://www.homedepot.com/>, in an infringing manner as described above. Upon information and

belief, Defendant has specifically intended that its customers use <https://www.homedepot.com/> including <https://www.homedepot.com/> in a manner that infringes at least claim 28 of the '138 Patent by, at a minimum, providing access to support for and instructions for <https://www.homedepot.com/> including <https://www.homedepot.com/> to its customers to enable them to infringe at least claim 28 of the '138 Patent, as described above. Even where performance of the steps required to infringe at least claim 28 of the '138 Patent is accomplished by Defendant and Defendant's customer jointly, Defendant's actions have solely caused each of the steps to be performed. Defendant has been aware of its infringement of the '138 patent since at least the filing of this lawsuit.

17. Plaintiff has been damaged as a result of Defendant's infringing conduct. Defendant is thus liable to Plaintiff for damages in an amount that adequately compensates Plaintiff for such infringement of the '138 Patent, *i.e.*, in an amount that by law cannot be less than would constitute a reasonable royalty for the use of the patented technology, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

18. The claims of the '138 Patent are method claims to which the marking requirements are not applicable. Plaintiff has therefore complied with the marking statute.

V. JURY DEMAND

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

VI. PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that the Court find in its favor and against Defendant, and that the Court grant Plaintiff the following relief:

- a. Judgment that one or more claims of United States Patent No. 11,049,138 have been infringed directly and indirectly, either literally and/or under the doctrine of equivalents, by Defendant;
- b. Judgment that Defendant account for and pay to Plaintiff all damages to and costs incurred by Plaintiff because of Defendant's infringing activities and other conduct complained of herein, and an accounting of all infringements and damages not presented at trial;
- c. That Plaintiff be granted pre-judgment and post-judgment interest on the damages caused by Defendant's infringing activities and other conduct complained of herein; and
- d. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

August 15, 2024

DIRECTION IP LAW

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