DesignVision: A New Artificial Intelligence-Powered Image Search Tool

Summary

The United States Patent and Trademark Office (USPTO or Office) has added DesignVision, a new artificial intelligence (AI)-based image search tool, to the Patents End-to-End (PE2E) search suite, to enhance efficiency and effectiveness of prior art searches. When an examiner conducts a search using DesignVision, details regarding the query and output will be communicated to the applicant and to the public via recordation in the application's file wrapper search notes and search history summary report. The USPTO has made this search tool available to design patent examiners for conducting prior art searches during the design patent examination process. The USPTO may make the search tool available to other examiners, such as utility patent examiners, at a later time at its discretion.

Background

Patent examiners, including design patent examiners, use tools such as PE2E Search to conduct prior art searches. The USPTO continues to work to modernize examiners' search toolkits and has been proactive in notifying the public of any new AI-based features in PE2E Search that are being made available to examiners. Recently integrated AI search features include "More Like This" and "Similarity Search." *See* "New PE2E Search Tool Using AI Search Features," 1494 OG 251 (January 11, 2022); "New Artificial Intelligence Functionality in PE2E Search," 1504 OG 359 (November 15, 2022).

DesignVision

DesignVision is an AI-based image search tool that was customized for the USPTO to aid and enhance USPTO examiners' image search capabilities by facilitating prior art searching using images as a query. This tool provides centralized access and federated searching, which allows an examiner to query multiple data sources simultaneously through a single search interface, of design patents, registrations, trademarks, and industrial designs from over 80 global registers, including the World Intellectual Property Organization (WIPO), European Union Intellectual Property Office (EUIPO), and other foreign intellectual property offices. The tool compares the query images uploaded by the examiner with available databases and returns search results based on, and sortable by, image similarity. Unique features of the tool include the ability to select up to seven uploaded images as a search query, user-controlled weighting of visual features, usercontrolled focus on specific features of the searched image, and text and classification filters. DesignVision augments, but does not replace, design patent examiners' other available search tools.

To ensure data security and maintain patent application confidentiality as required by 35 U.S.C. § 122(a), the USPTO has implemented National Institute of Standards and Technology (NIST) security controls and runs search queries within this tool using a Federal Risk and Authorization Management Program (FedRAMP)-authorized cloud service offering.

Search Recordation

To provide a complete, accurate, and uniform record of what the examiner has searched and considered for each application, the USPTO has established procedures for recording DesignVision search data in the application file. These procedures are consistent with current search recordation practices described in the Manual of Patent Examining Procedure (MPEP) Rev. 01.2024 (November 2024), section 719.05.

When an examiner uses DesignVision as part of a search for a patent application, the examiner's PE2E search history will clearly indicate that this tool was used, so that the public receives adequate notice when at least a portion of the examiner's search was performed using AI tools. To provide an accurate record of the search conducted, the Search Notes section of the Search Notes form in the application file wrapper will indicate which images of the application were used as a query. Additionally, the search history summary report (also called search history printout, *see* MPEP § 719.05) will indicate the number of images uploaded by the examiner, any filters applied to the image query, and the search results. In order to maintain confidentiality under 35 U.S.C. § 122, particularly in situations where the examiner searches multiple applications with one query, none of the actual images uploaded by the examiner into the tool interface will be included in the search history summary report. To further aid in examination efficiency, generation of the search history summary report from this tool has been automated.

Contact Information

Inquiries and feedback concerning this notice may be submitted by email to <u>designvisionsearch@uspto.gov</u>, or by mail addressed to: Commissioner for Patents, Box Comments-Patents, Post Office Box 1450, Alexandria, VA 22313-1450, and marked to the attention of Jonathan Horner.

Date: July 16,205 Cel

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