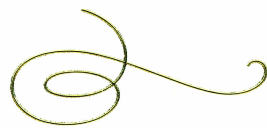
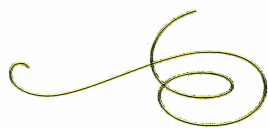


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The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Katherine Kelly Vidal

DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



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(12) **United States Patent**
Bossard et al.

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(54) **PREDICTIVE VECTOR GUIDE FOR CONSTRUCTION COST ESTIMATION**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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Related U.S. Application Data

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(51) **Int. Cl.**

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G06Q 10/0631 (2023.01)
G06F 30/13 (2020.01)
G06F 3/04812 (2022.01)

(52) **U.S. Cl.**

CPC **G06F 30/12** (2020.01); **G06F 3/04812** (2013.01); **G06F 30/13** (2020.01); **G06Q 10/06313** (2013.01)

(58) **Field of Classification Search**

CPC **G06F 30/12**; **G06F 30/13**; **G06F 3/04812**; **G06Q 10/06313**

See application file for complete search history.

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(57) **ABSTRACT**

A system and associated methodology for predictive construction cost estimation. Path data, extracted from a vector-based data source, is decoded and correlated into a point-map-to-line-segment array providing the ability to predictively snap a cursor on a user interface to points and/or line segments illustrated in the vector-based data source. Once identified and committed to by the user, the invention thereafter links additional snapped points/line segments/polylines enabling the user to quickly and efficient move throughout the data source crating a timely and accurate construction estimation.

30 Claims, 14 Drawing Sheets

