Site Selection Analytics Portfolio for Sale

Executive Summary

Mr. G. William Bailey, the principal inventor of the patents in this portfolio, is a West Point graduate and has over thirty years' experience in developing and applying model-based predictive techniques aimed at market analysis.

The patents in this portfolio cover site selection by businesses that need to evaluate new or alternative locations, including a chain of locations, for their businesses. Such businesses include grocery stores, hardware stores, office supply stores, fast food outlets, coffee shops, hospitals (hospital departments, such as geriatrics), and senior living facilities (nursing homes, assisted living, and continuing care retirement communities). Selecting a new location for a business involves significant analysis of the supply, demand, and net demand for the relevant products or services. The patents in this portfolio provide an empirical way to evaluate the market potential of a new location. The patents enable a three step process: (a) computation of travel time bands or zones around a proposed business location; (b) use of the bands or zones to identify relevant potential customer populations from the area's demography; and (c) apply empirically developed profiles that link travel time and demand/supply intensity to assess likely net demand at the proposed business.

The portfolio includes seven patents from a single family. The seven patents include over one-hundred claims with twenty-eight (28) independent claims and seventy-five (75) dependent claims. The claims are a good mix of system, method, and computer-readable medium claims.

Singh Law, PLLC ("SLP") is the exclusive broker for these patents. SLP has developed evidence of use materials for a subset of the patents in this portfolio and is continuing to evaluate additional claims and evidence of use. Exemplary evidence of use materials are available for OfficeMax, Wendy's, Petco, 24 Hour Fitness, and Marco's Pizza. For due diligence, the evidence of use materials can be made available to potential buyers under NDA.

Disclaimer

The information package is provided solely to help potential buyers evaluate any potential interest in the technology described in the patents available for sale. This information package and any other communications with the inventor or SLP regarding these products should not be construed to express any opinion regarding the use of the patented technology by any product or company mentioned. This information package does not constitute a legal or professional representation regarding infringement, validity, or valuation. Each potential buyer by accepting and using this information acknowledges that it is the potential buyer's responsibility to perform full and complete due diligence concerning this patent portfolio, particularly, with respect to the validity, infringement, and market application of the patents in this patent portfolio. SLP represents Mr. G. William Bailey only and no attorney-client relationship exists with respect to the potential buyers.

Market Overview

The primary infringing parties of these patents are large businesses that need to evaluate new locations for their businesses. Such businesses include, grocery stores, hardware stores, office supplies stores, fast food outlets, and coffee shops. When deciding to open a new store, multiple sites need evaluation to ensure a proper return on investment. These patents describe geographic information systems based technology that allows businesses to use location intelligence in selecting a site.
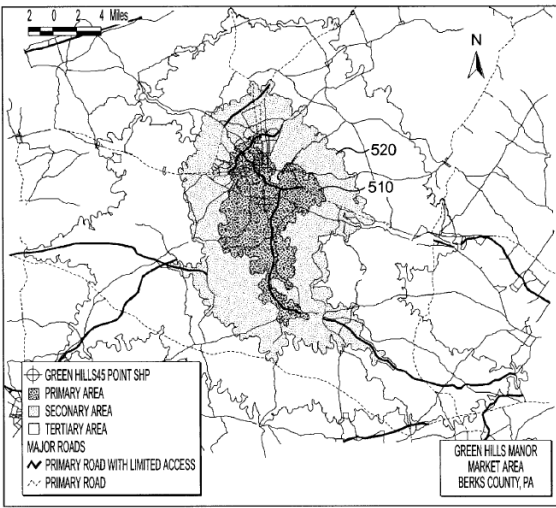
This portfolio has the ability to target[1] approximately over $17 Billion dollars in 2013 annual revenue.[2] This revenue relates to the gross merchandise sales of select retail businesses for which SLP has developed the evidence of use. Other businesses in the retail space are also likely to use infringing site location analytics technology. As an example, Starbucks uses ESRI's tools[3] (one of the leading providers of site selection analytics tools) to select new sites for its stores and had a $14.9 Billion dollars revenue in 2013. In addition to retail stores, hospitals and senior living facilities (nursing homes, assisted living, and continuing care retirement communities) are also likely to use the infringing site location analytics technology.

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[1] Patent damages law is complex and thus potential buyers must perform their own detailed diligence to determine the revenues that might be impacted by these patents.

[2] All financials are preliminary estimates and are based on third party data, such as Hoover's or the relevant companies' investor relations department.

[3] Starbuck's may use other site selection tools, as well.

Patents

Patent Number	Priority Date	Title
6,604,083	June 12, 1997	Market Determination Based on Travel Time Bands

Summary:

For site selection, a market area is defined around a point on a map. Geographic units, such as block groups, are selected from bands of increasing travel time from the location of the point on the map. For the geographic units within the market area, values for market-related variables, such as the percentage of households in a certain income range are calculated. Finally, a net demand for a service or commodity is determined based on the calculated values.

Exemplary claim 5:

A method for preparing a market study comprising:

defining a geographic area around a selected location, the geographic area corresponding to a market based on a selected maximum travel time;

defining a plurality of bands based on increasing travel time from the location; selecting geographic units in the bands;

defining market-related variables for the market;

calculating values corresponding to the market-related variables for each of the selected geographic units; and

calculating a net demand for a service or a commodity in the market based on the values.

Patent Number	Priority Date	Title
7,043,445	June 12, 1997	Market Determination System

Summary:

For site selection, a location input within a market area is received. A number of potential customers within the census units in the market area is determined. A demand correction factor, such as household income, is determined by sampling data from within the market area. Using the demand correction factor, the demand for the product or service is determined. Finally, a net demand is determined by factoring the supply of the product or service in the market area.
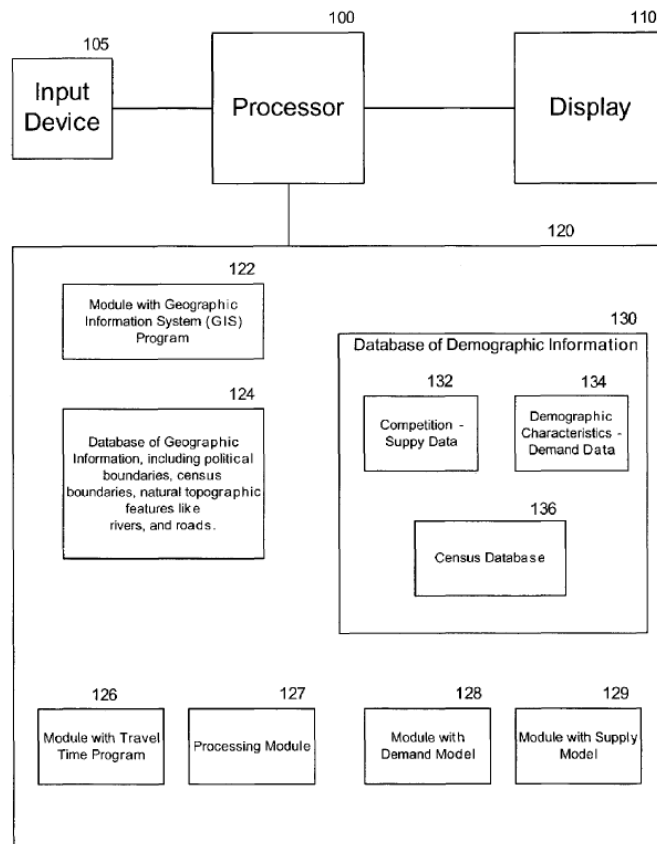
Exemplary claim 11:

A data processor implemented method for determining a demand for a product or service within a plurality of census units located within a market area, the method comprising:
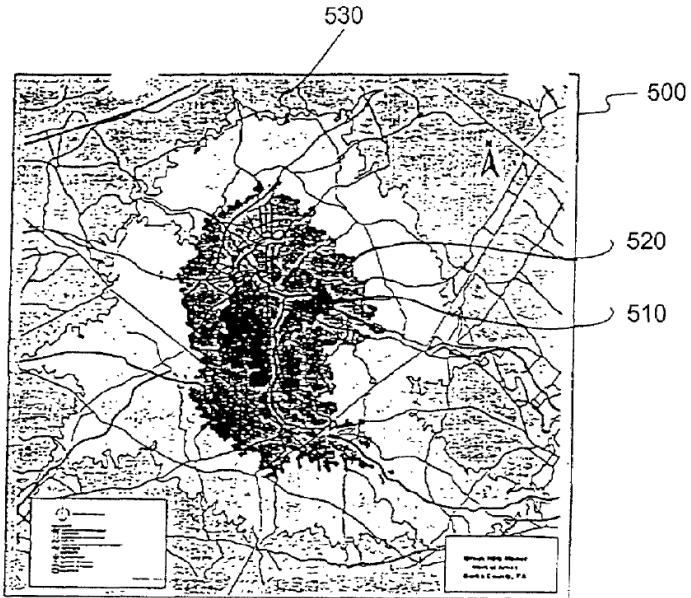
receiving, a location input for the business;

determining a number of potential customers within each of the plurality of census units determining a demand correction factor by sampling demand data from at least within the market area;

determining the demand for the product or service offered by the at least one business using the demand correction factor;

determining a supply of the product or service in the market area; and

determining a net demand for the product or service offered by the business in the market area using the data processor.

Patent Number	Priority Date	Title
7,412,398	June 12, 1997	Method for Analyzing Net Demand for a Market Area Utilizing Weighted Bands

Summary:

For site selection, a market area is defined using bands. The bands are weighted by a market-related factor, such as household income. A net demand model is applied to the bands. A result, which is an indicator for the market, such as the market potential, corresponding to the net demand model is generated and stored.

Exemplary claim 1:

A method for analyzing a market area, the method comprising:

defining the market area using a plurality of bands;

weighting the plurality of bands according to a market-related factor including weighting the data within the market area and applying individual weights to the plurality of bands;

applying a net demand model to the plurality of weighted bands;

generating a result corresponding to the net demand model; and

storing the result, wherein the result is an indicator of the market.

Patent Number	Priority Date	Title
7,516,085	June 12, 1997	Market Determination System

Summary:

For site selection, a location input for a business is received. Using a geographical information system database, travel time traces around the business location are calculated. A number of potential customers within census units in the market area is determined. The number of potential customers in the travel time traces is weighted. Using the weighted number of potential customers, a demand for a product or service offered by the business is determined.
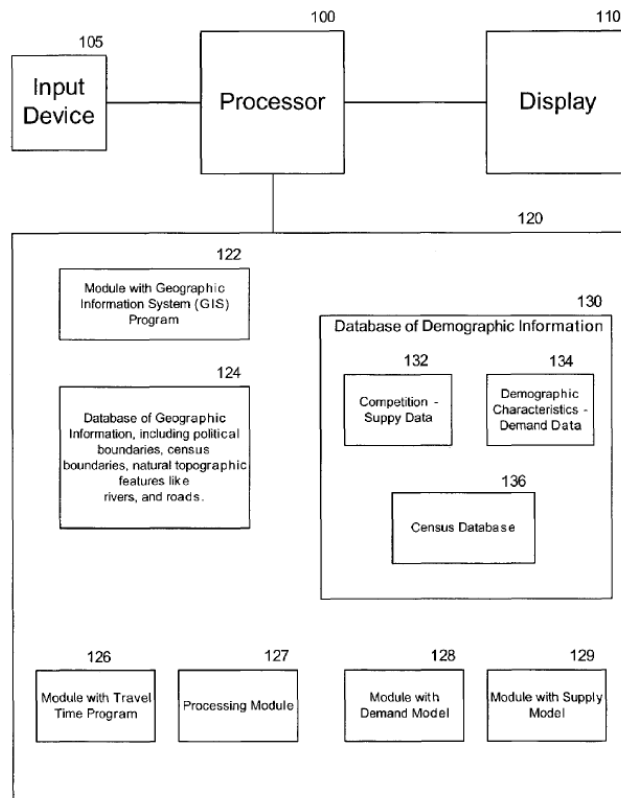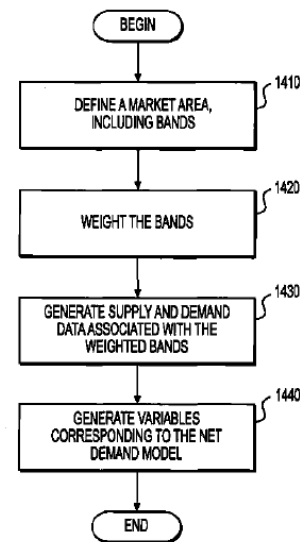
Exemplary claim 14:

A data processor implemented method for determining a demand for a product or service within a plurality of census units located within a market area, the method comprising:

receiving a location input for at least one business offering the product or service;

calculating a plurality of travel time traces around at least one business location using at least one geographical information system database;

determining a number of potential customers within each of the plurality of census units using at least one demographic information database;

weighting the number of potential customers in the travel time traces within each of the plurality of census units; and

determining the demand for the product or service offered by the business using the weighted numbers of potential customers within each of the plurality of census units using the data processor.

Patent Number	Priority Date	Title
7,752,069	June 12, 1997	Computer-Implemented Method for Site Selection Utilizing Weighted Bands

Summary:

For site selection, a first area corresponding to a first site and a second area corresponding to a second site are defined. Bands for the two market areas are weighted using a common market-related factor. Next, a net demand model is applied to the market areas by: (1) obtaining supply and demand data for the bands, and (2) adjusting the supply and demand based on individual weights applied to the bands. Based on the adjusted supply and demand data, maximum commodity price is determined for each of the two market areas. One of the market areas is selected based on the determined maximum commodity prices.

Exemplary claim 1:

A computer implemented method for selecting a site, the method comprising steps, performed by a computer, of:

defining a first market area for a first site and a second market area for a second site, the first and second market areas being associated with population data;

establishing a plurality of bands for the first market area and the second market area;

weighting the plurality of bands for the first market area and the second market area according to a common market-related factor, the step of weighting comprising weighting the population data associated with the first and second market areas and applying individual weights to the plurality of bands;

applying a net demand model to the plurality of bands for the first market and to the plurality of bands for the second market area, wherein the step of applying comprises:

obtaining supply and demand data for the plurality of bands of the first market area and for the plurality of bands of the second market area based on the weighted population data associated with the first and second market areas; and

adjusting the supply and demand data based on the individual weights applied to the plurality of bands;

preparing, using the computer, a first maximum commodity price for the first market area and a second maximum commodity price for the second market area based on at least the adjusted supply and demand data;

selecting one of the first site and the second site based on the generated first maximum commodity price and the second maximum commodity price; and

storing the first maximum commodity price and the second maximum commodity price.

Patent Number	Priority Date	Title
7,877,287	June 12, 1997	System and Method for Selecting Multiple Sites Using Weighted Bands

Summary:

For selecting multiple sites, market areas in a region are defined. Bands within the market areas are weighted by a market-related factor. A net demand model is applied to the weighted bands. This step includes: (1) adjusting supply and demand data for the market areas, and (2) generating values for parameters associated with the net demand model. Next, cash in-flows and out-flows are assigned to at least one of the sites. Finally, at least one of the sites is selected based on financial indicators that are based on the assigned cash in-flows and out-flows.
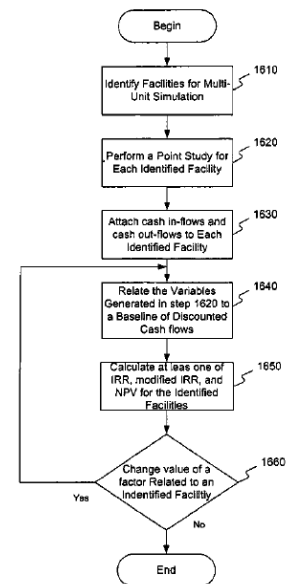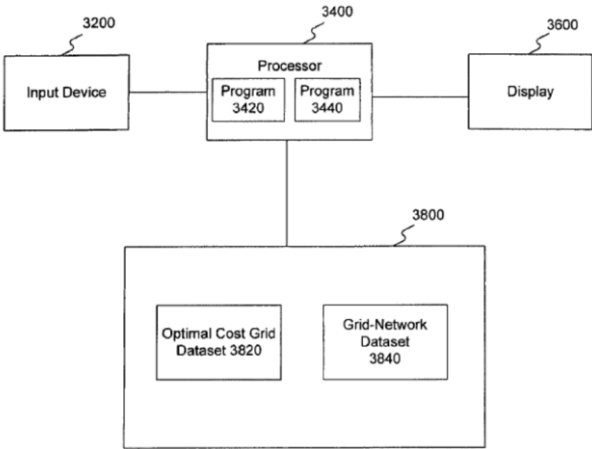
Exemplary claim 1:

A computer-implemented method for selecting multiple sites using weighted bands, the method comprising:

defining market areas corresponding to a plurality of sites within a geographic region, the market areas being associated with corresponding population data;

establishing a plurality of bands for at least one of the market areas;

weighting the plurality of bands according to a market-related factor, the step of weighting comprising weighting the population data associated with the market areas, and applying individual weights to the bands;

applying a net demand model to the weighted bands, the step of applying comprising:

obtaining supply and demand data for the bands based on the weighted population data associated with the market areas;

adjusting the supply and demand data based on the individual weights applied to the bands; and

generating, for at least one of the sites, values of parameters associated with the net demand model, based on at least the adjusted supply and demand data;

assigning cash in-flows and cash out-flows to the at least one of the sites, the assignment being based on at least the generated values;

calculating, using a processor, financial indicators for subsets of the sites, based on at least the assigned cash in-flows and cash out-flows; and

selecting one of the subsets of sites based on at least the calculated financial indicators.

Patent Number	Priority Date	Title
8,332,247	June 12, 1997	Methods and Systems or Optimizing Network Travel Costs

Summary:

For selecting a route with a minimum travel cost from an initial location to a query point within a region having a network, a grid with cells representing unit costs of travel in the grid is obtained. Datasets including travel costs: (1) between nodes of the network, (2) between cells of the grid, and (3) between the network and the grid are prepared. These datasets are used to calculate the minimum travel cost from the initial location to the query point.

Exemplary claim 1:

A computer-implemented method for computing travel costs across a region having an embedded network, the method comprising steps, performed by a computer, of:

obtaining data associated with the network, the network comprising nodes and edges connecting the nodes, wherein the data associated with the edges indicates (i) allowed directions of travel along the edges, (ii) total travel costs to traverse the edges, and (iii) whether the edges are accessible;

obtaining a grid representing the region, the grid comprising a plurality of cells covering the region and representing unit costs of travel across the cells;

preparing a cost-grid dataset comprising costs for off-network travel between an initial location in the region and the plurality of cells in the grid;

preparing, using the computer, a hybrid grid-network dataset comprising network travel costs between nodes of the network, the off-network travel costs between cells of the grid, and travel costs between the network and the grid, wherein the preparing step comprises:

rasterizing accessible edges of the network to locate grid cells connecting the network with the grid;

identifying, based on the rasterized edges, one or more of the plurality of cells of the grid that are accessible to the network; and

computing the network travel costs associated with travel between the nodes of the network, and the travel costs between the nodes of the network and connected grid cells;

calculating back-links between elements of the hybrid grid-network dataset, the back-links reflecting travel routes originating at the initial location;

storing, using a storage device, the prepared hybrid grid-network dataset and the calculated back-links; and

querying the hybrid grid-network dataset and the calculated back-links to identify a route with a minimum travel cost from the initial location to a query point within the region.