Patents involving machine learning

Ron Schoenbaum
June 2, 2016
Topics

- What types of machine learning ideas can be patented?
- When does patent protection make sense?
Aldus Huxley → Aldous Huxley

<table>
<thead>
<tr>
<th>Spellings</th>
<th># of occurrences</th>
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<tbody>
<tr>
<td>Aldous Huxley → Aldus Huxley</td>
<td>37</td>
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<td>Aldus Huxley → Aldous Huxley</td>
<td>1</td>
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</tbody>
</table>
Aldus Huxley → Aldous Huxley
Aldous Huxley → Aldus Huxley

# of occurrences
37
1
United States Patent
Ortega et al.

Patent No.: US 6,564,213 B1
Date of Patent: May 13, 2003

SEARCH QUERY AUTOCOMPLETION

Inventors: Ruben E. Ortega, Seattle, WA (US);
John W. Avery, Seattle, WA (US);
Robert Frederick, Seattle, WA (US)

Assignee: Amazon.com, Inc., Seattle, WA (US)

FOREIGN PATENT DOCUMENTS

<table>
<thead>
<tr>
<th>Patent No.</th>
<th>Date</th>
<th>Inventors/Affiliation</th>
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<tbody>
<tr>
<td>6,421,675 B1</td>
<td>7/2002</td>
<td>Ryan et al. ................. 707/100</td>
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<tr>
<td>6,466,918 B1 *</td>
<td>10/2002</td>
<td>Spiegel et al. .............. 705/27</td>
</tr>
</tbody>
</table>
Search: SONY

SONY VCR
SONY TV
SONY TRINITRON
SONY HANDYCAM
(12) United States Patent
Lee et al.

(54) GENERATION AND CONTEXTUAL PRESENTATION OF STATISTICAL DATA REFLECTIVE OF USER SELECTIONS FROM AN ELECTRONIC CATALOG

(75) Inventors: Dennis Lee, Mercer Island, WA (US);
Randal Henne, Seattle, WA (US);
Jeffrey Holden, Seattle, WA (US);
David Hsu, Seattle, WA (US); Brent Smith, Redmond, WA (US); Eric Vadon, Seattle, WA (US)

(73) Assignee: Amazon Technologies, Inc., Reno, NV

(10) Patent No.: US 8,326,658 B1
(45) Date of Patent: Dec. 4, 2012

6,505,185 B1 1/2003 Chickering
6,691,163 B1 2/2004 Tufts
6,782,370 B1 8/2004 Stack
6,871,186 B1 3/2005 Tuzhilin et al.
7,062,510 B1 6/2006 Eldering

(Continued)
Cuisinart DLC-5 7-Cup Capacity Food Processor, White

Choose: See Other Options Go

List Price: $180.00
Price: $79.00
You Save: $101.00 (56%)

Availability: Usually ships within 24 hours

Users who made a purchase in Kitchen & Housewares after viewing this page bought:

3% bought the Cuisinart DLC-10S 7-Cup Pro Classic Food Processor $99.99
3% bought the Cuisinart DLC-2007 Prep 7 7-Cup Food Processor $149.99
2% bought the product on this page $79.99
1% bought the Cuisinart DLC-2011BC Prep 11Plus Food Processor $199.99
United States Patent
Henne et al.

Patent No.: US 8,145,512 B1
Date of Patent: Mar. 27, 2012

Data mining of user activity data to identify sequential item acquisition patterns

Inventors: Randal M. Henne, Seattle, WA (US); Dwayne S. Benefield, Issaquah, WA (US)

Other Publications
Canon i560 Desktop Photo Printer

List Price: $99.99
Our Price: $89.00
Availability: In Stock

Users who bought this item bought the following 3–5 months later:
• 20% bought Canon BCI–6Y Yellow Ink Tank
• 19% bought Canon BCI–6PM Magenta Ink Tank
• 18% bought Canon BCI–6PC Cyan Ink Tank

Users who bought this item bought the following 6 or more months later:
• 24% bought Canon BCI–6BK Black Ink Tank
• 9% bought PCBI–3EBK Canon-Compatible Black Ink Tank

Users who bought this item subsequently bought the following:
• 16% bought Canon Photo Paper Plus 4”x6” Glossy
• 8% bought Belkin F2A046–10 A–B Parallel Printer Cable
Should I seek patent protection?

Factors to consider:

- Are uses of the invention detectable?
- Does the invention provide a competitive advantage?
- Does close “prior art” exist?
- Does the company own the patent rights?