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- (71) Applicant: MICROSOFT TECHNOLOGY LICENSING, LLC [US/US]; Attn: Patent Group Docketing (Bldg. 8/1000), One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) Inventors: ANDREW, Felix; MICROSOFT TECHNOLOGY LICENSING, LLC, Attn: Patent Group Docketing (Bldg. 8/1000), One Microsoft Way, Redmond, Washington

98052-6399 (US). **MONCAYO, Silvana**; MICROSOFT TECHNOLOGY LICENSING, LLC, Attn: Patent Group Docketing (Bldg. 8/1000), One Microsoft Way, Redmond, Washington 98052-6399 (US). **MAERTENS, Katherine Anne**; MICROSOFT TECHNOLOGY LICENSING, LLC, Attn: Patent Group Docketing (Bldg. 8/1000), One Microsoft Way, Redmond, Washington 98052-6399 (US). **THOMAS, Myron**; MICROSOFT TECHNOLOGY LICENSING, LLC, Attn: Patent Group Docketing (Bldg. 8/1000), One Microsoft Way, Redmond, Washington 98052-6399 (US).

(74) Agent: **MINHAS, Sandip** et al.; MICROSOFT CORPORATION, Attn: Patent Group Docketing (Bldg. 8/1000), One Microsoft Way, Redmond, Washington 98052-6399 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

(54) Title: MULTI MODAL ANNOTATION OF MAPS

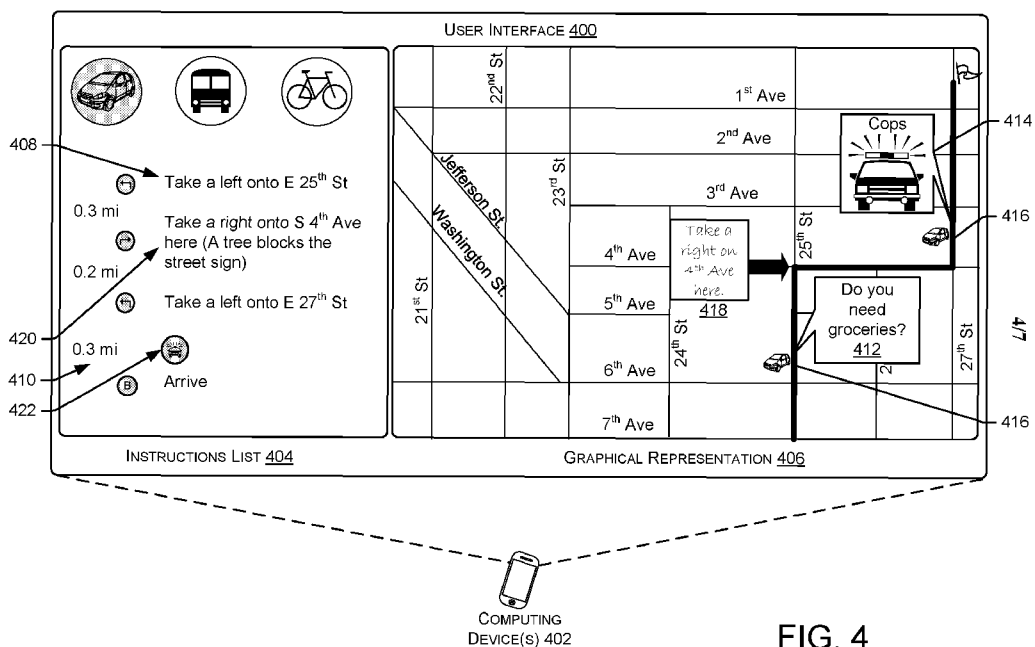


FIG. 4

(57) Abstract: Techniques for modifying and presenting instructions for traversing a route include obtaining original instructions and receiving input to modify the instructions. The instructions may be modified and/or annotated based on the input received to provide more intuitive and helpful instructions for traversing a route. The modified instructions may be presented to a user of a computing device as the computing device traverses the route. The modifications and/or annotations to the original instructions may be presented as the computing device traverses the route based at least in part on the location and/or speed of the computing device on the route.



HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:

30 November 2017 (30.11.2017)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2017/023271

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01C21/36
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
G01C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2009/292462 A1 (BABETSKI JOSHUA J [US]) 26 November 2009 (2009-11-26) paragraphs [0030] - [0032], [0039], [0048], [0050] - [0052], [0064] figures 1,2,7	1-8
X	US 2006/064241 A1 (RASMUSSEN JENS E [US] ET AL) 23 March 2006 (2006-03-23) paragraphs [0051] - [0054] figures 6-11A	1
X	US 8 306 749 B1 (PETERSEN MORTEN JUST [CH] ET AL) 6 November 2012 (2012-11-06) figures 1-4	1,2
X	US 2002/120397 A1 (KEPLER MICHAEL A [US]) 29 August 2002 (2002-08-29) paragraphs [0032], [0037], [0050]	9-15

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search 11 October 2017	Date of mailing of the international search report 18/10/2017
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Berbil Bautista, L
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2017/023271

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8

claims 1-8 deal with the generation of user-modified route instructions

2. claims: 9-15

claims 9-15 deal with the output of route instruction modifications

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2017/023271

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009292462 A1	26-11-2009	US 2009292462 A1 US 2013317746 A1	26-11-2009 28-11-2013

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