



(51) International Patent Classification:

A01B 69/00 (2006.01) G05D 1/02 (2006.01)

(21) International Application Number:

PCT/IB2010/003091

(22) International Filing Date:

3 December 2010 (03.12.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/642,005 18 December 2009 (18.12.2009) US

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(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, BR, BW, BY, BZ,

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, 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.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

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

1 December 2011

(54) Title: CONTROLLING THE HEIGHT OF AN IMPLEMENT COUPLED TO AN AGRICULTURAL VEHICLE BASED ON TOPOGRAPHY DATA

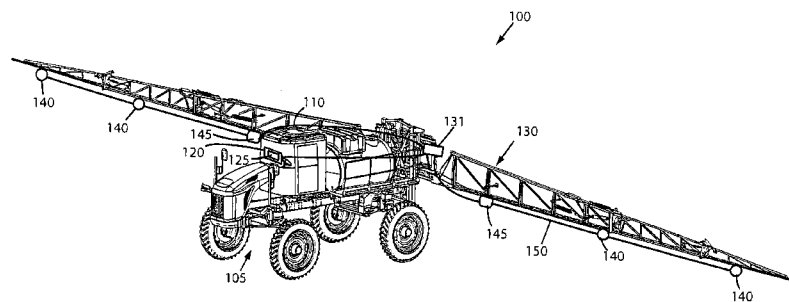


FIG. 1

(57) Abstract: A system for providing a height change command for an implement, comprises a height control module configured to interact with a computer, and configured to receive topographical data, provide a virtual field map based on said topographical data, provide a forward view polygon for an implement based on said virtual field map, and provide a height change command for said implement based on said forward view polygon and an implement control unit configured to receive said height change command and control movement of said implement.



INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2010/003091

A. CLASSIFICATION OF SUBJECT MATTER

INV. A01B69/00

ADD. G05D1/02

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)

G05D G05B A01D A01B

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 practical, 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	WO 2008/088916 A2 (DEERE & CO [US]; PICKETT TERENCE DANIEL [US]; HAN SHUFENG [US]) 24 July 2008 (2008-07-24) the whole document	1-24
Y	US 6 085 135 A (STECKEL THILO [DE]) 4 July 2000 (2000-07-04) column 2, line 15 - column 6, line 25 figures 1-3	1-24
Y	US 6 236 924 B1 (MOTZ DARIN S [US] ET AL) 22 May 2001 (2001-05-22) column 2, line 25 - column 7, line 64 figures 1-5	1-24



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 document 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

26 May 2011

Date of mailing of the international search report

15/09/2011

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2010/003091

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008088916	A2	24-07-2008	AU 2008206582 A1 24-07-2008
			EP 2126757 A2 02-12-2009
			US 2008177449 A1 24-07-2008
US 6085135	A	04-07-2000	DE 19706614 A1 27-08-1998
			EP 0860688 A2 26-08-1998
US 6236924	B1	22-05-2001	NONE

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2010/003091

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.:

1-24

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: 1-24

Height change command for a machine implement.

2. claims: 25-27

Obstacle avoidance method
