

Search query (4): [SP]: agricultural implement and implement operator monitoring apparatus, systems, and methods apparatus, systems and methods for monitoring one or more agricultural implements during agricultural operations and for monitoring operator performance criterion. in some embodiment, the operator performance criterion may be reported to a monitor on the agricultural implement as well as a remote fleet monitor.

Results: 10

Search history

Search PN=(WO2015/086057) (Results 1)

1:

Search [SP]: expanded protocol frames for data transmission transmitting a data frame from a source device to a target device, wherein the source device and the target device use a protocol defining a request command frame for polling for pending data, involving obtaining data to be transmitted to the target device in the source device, generating a request command frame for polling data pending for the source device at the target device, allocating the data to be transmitted in the request command frame, and transmitting the request command frame with the allocated data to be transmitted to the target device. (Results 3)

Search PN=(WO/2015/153809) (Results 1)

3:

Search [SP]: agricultural implement and implement operator monitoring apparatus, systems, and methods apparatus, systems and methods for monitoring one or more agricultural implements during agricultural operations and for monitoring operator performance criterion. in some embodiment, the operator performance criterion may be reported to a monitor on the agricultural implement as well as a remote fleet monitor. (Results 10)

Title: AGRICULTURAL IMPLEMENT AND IMPLEMENT OPERATOR MONITORING APPARATUS, SYSTEMS, AND METHODS

Abstract: Source: US2017032473A [EN] Apparatus, systems and methods for monitoring one or more agricultural implements during agricultural operations and for monitoring operator performance criterion. In some embodiment, the operator performance criterion may be reported to a monitor on the agricultural implement as well as a remote fleet monitor.

Classifications:

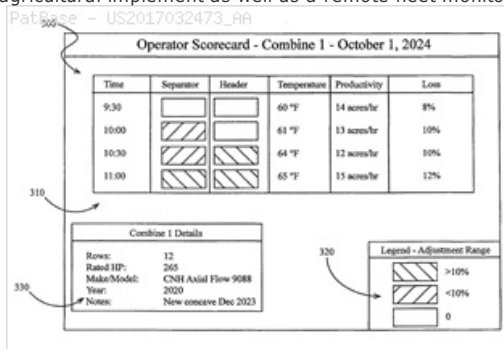
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G06Q50/02 (Advanced/Invention)

CPC: A01D41/1271 G06Q50/02 A01D41/06 G06Q10/06398

A01D41/127 A01D41/1273

US: 705/7.42



Family:

Publication number	Publication date	Application number	Application date
AU2015240770 AA	20151008	AU20150240770	20150401
BR112016020073 A2	20170815	BR20161120073	20150401
CA2941026 AA	20160826	CA20152941026	20150401
CL2016002141 A1	20170428	CL20160002141	20160824
CN106163261 A	20161123	CN201580011693	20150401
CO20160001114 A2	20170113	CO20160001114	20160824
EP3125670 A1	20170208	EP20150774051	20150401
EP3125670 A4	20171220	EP20150774051	20150401
IN201617028659 A	20170113	IN201617028659	20160823
US2017032473 AA	20170202	US20150300760	20150401
WO15153809 A1	20151008	WO2015US23949	20150401
ZA201605898 A	20171025	ZA20160005898	20150401

Priority:

US20140973593P 20140401 US20150300760 20150401 WO2015US23949 20150401

Probable Assignee: CLIMATE CORP

Assignee(s): (std): PREC PLANTING LLC ; PRECISE PLANTING LLC ; CLIMATE CORP

Assignee(s): FRANK WILLIAM ; KOCH JUSTIN ; PRECISION PLANTING LLC ; SAUDER DOUG

Inventor(s): (std): FRANK WILLIAM ; KOCH JUSTIN ; SAUDER DOUG

Inventor(s): WILLIAM FRANK ; JUSTIN KOCH ; DOUG SAUDER

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; RIDOUT AND MAYBEE LLP; ESTUDIO CLARKE MODET AND CO CHILE LIMITADA; CAROLINA MERCEDES DAZA MONTALVO; FERRARI BARBARA; OPPOLD THOMAS J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: GRAIN LOSS MONITOR

Abstract: Source: US3935866A [EN] A grain loss monitor for a combine harvester derives a grain loss rate signal in accordance with the number of grains impinging on a transducer and a ground speed signal proportional to the ground speed of the combine and divides the former by the latter to derive an analog of grain loss per unit area which is independent of time. The preferred embodiment includes a one-shot multivibrator which is triggered to its unstable state to generate a fixed width pulse each time a grain kernel strikes the transducer, a tachometer coupled to the combine wheels and a period timed integrator triggered by tachometer pulses for deriving a unidirectional ground speed voltage inversely proportional to frequency of the tachometer pulses, a pulse frequency modulation chopper circuit turned on and off by the fixed width one-shot pulses and having its peak voltage controlled by the unidirectional ground speed signal for accomplishing division of grain loss rate by combine ground speed, and an averaging circuit for determining the average voltage of the chopper output pulses as an analog of grain loss per unit area.

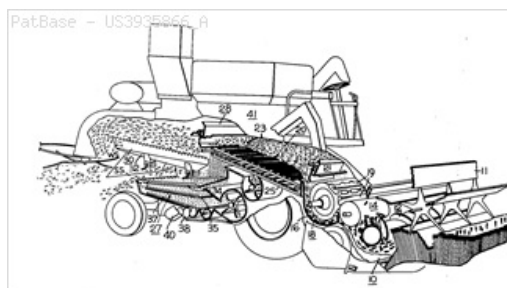
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G01D21/02 (Advanced/Invention);

A01D41/00 (Core/Invention)

International (IPC 1-7): A01D41/02 A01F12/00 G01D1/16

G01D21/02

CPC: Y10S56/15 A01D41/1273**European:** A01D41/127A1B A01D41/127A2**US:** 130/24 460/4 460/90 56/DIG.15**Family:**

Publication number	Publication date	Application number	Application date
CA1043439 A1	19781128	CA19750232772	19750801
US3935866 A	19760203	US19740536030	19741223

Priority:

US19740536030 19741223

Probable Assignee: ALLIS CHALMERS**Assignee(s):** (std): ALLIS CHALMERS

Assignee(s): ALLIS CHALMERS CORP ; CONNECTICUT NATIONAL BANK A NATIONAL BANKING ASSOC ; CONNECTICUT NATIONAL BANK A NATIONAL BANKING ASSOCIATION TRUSTEE AS ; DEUTZ ALLIS A CORP OF DE CORP ; DEUTZ ALLIS CORP ; ITT COMMERCIAL FINANCE CORP ; MOORE DAVID L ; NORTHUP EDWIN M ; WOODS KATHLEEN D ; WHIRLPOOL FINANCIAL CORP ; WOODS KATHLEEN D TRUSTEE AS ; WHIRLPOOL FINANCIAL A DE CORP CORP ; SHAVER J LYLE

Inventor(s): (std): MOORE DAVID L ; NORTHUP EDWIN M ; SHAVER J LYLE

Title: Harvester feedrate control with tilt compensation

Abstract: Source: US2003060245A [EN] A combine with a throughput dependent speed control includes an angle sensor responsive to uphill, downhill and sidehill slopes. When the combine is angled from a level position, harvest speed is lowered to prevent grain losses from increasing above a target level. The control continuously learns tilt angle, loss and throughput correlation, and the speed reduction is selected based upon the learned correlation. In the preferred embodiment, throughput is estimated utilizing rotor variable drive actuator pressure (RVDAP), and a target RVDAP is modified for short periods of time in accordance with the learned correlation.

Classifications:

International (IPC 8-9): A01D41/12 A01D41/127

A01D75/28 (Advanced/Invention);

A01D41/00 A01D75/00 (Core/Invention)

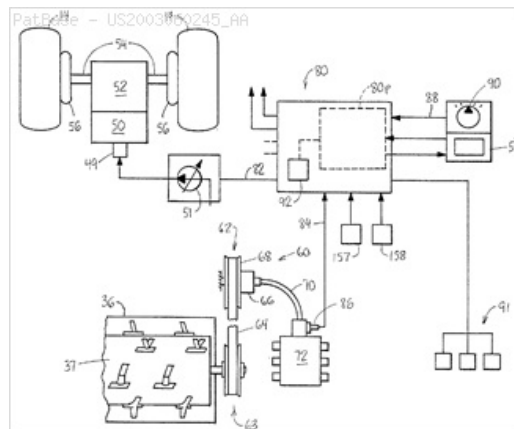
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A01F12/00 A01F12/28

CPC: A01D41/127 A01D75/28 A01F2015/0808

European: A01D41/127 A01D75/28 K01F15/08A

US: 460/1 460/2 460/2P 460/4 56/10.2C 701/50



Family:

Publication number	Publication date	Application number	Application date
AR036638 AA	20040922	AR2002P103626	20020926
AU2002301040 AA	20030612	AU20020301040	20020916
AU2002301040 BB	20080515	AU20020301040	20020916
AU2002301040 BH	20080605	AU20020301040	20020916
BRPI0203874 A	20030916	BR2002PI03874	20020924
CA2396321 AA	20030327	CA20022396321	20020729
CA2396321 C	20060606	CA20022396321	20020729
DE50209579 D1	20070412	DE20025009579	20020909
DK1297734 T3	20070618	DK20020102333T	20020909
EP1297734 A1	20030402	EP20020102333	20020909
EP1297734 B1	20070228	EP20020102333	20020909
US2003060245 AA	20030327	US20010967654	20010927
US6592453 BB	20030715	US20010967654	20010927

Priority:

CA20022396321 20020729 US20010967654 20010927

Probable Assignee: DEERE AND CO

Assignee(s): (std): DEERE AND CO

Assignee(s): DEERE AND COMPANY ; LITCKE JERRY DEAN ; MERTINS KARL HEINZ O ; BURKE DANIEL JAMES ;
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Inventor(s): (std) BURKE DANIEL JAMES ; COERS BRUCE ALAN ; COOPER WILLIAM F ; LITCKE JERRY DEAN ; MERTINS KARL HEINZ OTTO ; MERTINS KARL HEINZ O ; AL BRUCE ALAN COERS ET

Inventor(s): BRUCE ALAN COERS ET AL ; WILLIAM F COOPER ; KARL HEINZ OTTO MERTINS ; JERRY DEAN LITKE ; DANIEL JAMES BURKE ; BRUCE ALAN COERS

Agent(s): DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; BORDEN LADNER GERVAIS LLP

Designated states: BE DE DK FR GB IT

Title: PROGRAMMABLE FUNCTION CONTROL FOR COMBINE

Abstract: Source: US2004006957A [EN] A function management system includes a programmable control unit that can automatically coordinate combine traction functions and/or implement functions. In a learn mode, the operator performs a sequence of manual manipulations of the operator controlled traction and implement devices, and the control unit records and then stores information pertaining to the sequence of device operations. In an execute mode, the control unit automatically performs the sequence of device operations so that the sequence of operations occurs at the same intervals at which they were learned. As one example of a sequence, when the combine approaches the end of a field, at the touch of one button, the header is raised, the unloading auger is pivoted to an inboard position for safe turning, the ground speed is increased for rapid travel, the four wheel drive used during harvesting in the field is disengaged, the crop-processing implement speed, such as a rotor speed for a rotary crop-processing unit, is decreased, and steering of the combine is controlled to position the combine to the point of reentering the field. The sequence of device operations can be pre-programmed or input by the operator in the learn mode.

Classifications:

International (IPC 8-9): A01B63/10 A01B63/108 A01B79/00 A01D41/06 A01D41/127 G05B15/02 G05B19/04 G05D1/02 (Advanced/Invention);

A01B63/10 A01B63/102 A01B79/00 A01D41/00 G05B15/02 G05B19/04 G05D1/02 (Core/Invention)

International (IPC 1-7): A01B63/111 A01D41/02 A01D41/06 A01D41/127 A01D75/00 A01F12/56 G05B15/02 G05B19/04 G05D1/02

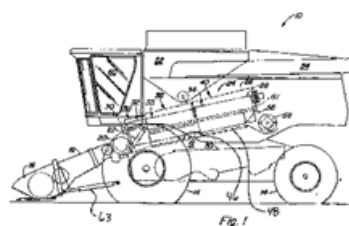
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European: A01B63/108 A01B63/10A A01B79/00P A01D41/127

US: 56/10.20G 56/10.2G 56/102 56/102G 701/50

PatBase - US2004006957_AA

Patent Application Publication Jan. 15, 2004 Sheet 1 of 6 US 2004/006957 A1



Family:

Publication number	Publication date	Application number	Application date
AR040486 AA	20050406	AR2003P102494	20030710
BRPI0302184 A	20040908	BR2003PI02184	20030710
CA2433894 AA	20040111	CA20032433894	20030626
CA2433894 C	20070109	CA20032433894	20030626
DE50301459 D1	20051201	DE20035001459	20030628
EP1380202 A1	20040114	EP20030014793	20030628
EP1380202 B1	20051026	EP20030014793	20030628
US2004006957 AA	20040115	US20020193069	20020711
US6681551 BA	20040127	US20020193069	20020711

Priority:

CA20032433894 20030626 US20020193069 20020711

Probable Assignee: DEERE AND CO

Assignee(s): (std): DAVID SHEIDLER ALAN ; DEERE AND CO ; HENNINGS KENNY L ; SAHLIN MARK PETER

Assignee(s): SHEIDLER ALAN DAVID ; DEERE AND COMPANY ; DEERE AND COMPANY MOLINE

Inventor(s): (std): DAVID SHEIDLER ALAN ; SHEIDLER ALAN DAVID ; SAHLIN MARK PETER ; HENNINGS KENNY L

Inventor(s): MARK PETER SAHLIN ; KENNY L HENNINGS ; ALAN DAVID SHEIDLER

Agent(s): BORDEN LADNER GERVAIS LLP

Designated states: BE DE FR GB IT

Title: AGRICULTURAL MACHINE AND OPERATOR PERFORMANCE INFORMATION SYSTEMS AND RELATED METHODS

Abstract: Source: US2010036696A [EN] In one example, a system can comprise a first data gathering mechanism set and a data processing mechanism set. The a first data gathering mechanism set can be configured to gather a first operational data set during operation of a first agricultural machine set, and to transmit the first operational data set to a network. The first operational data set can comprise information representative of one or more characteristics of an agricultural crop during production. The a data processing mechanism can be configured to store a combined data set comprising the first operational data set, and generate one or more reports based on the combined data set. Other embodiments and related methods are also disclosed herein.

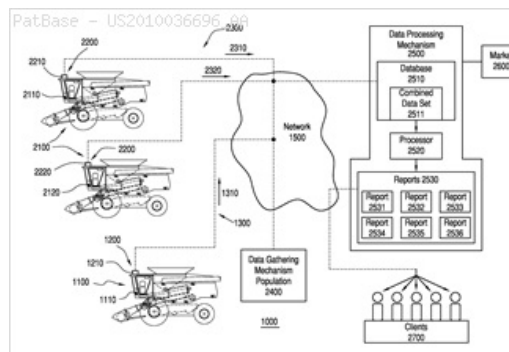
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CPC: G06F17/3087 G06Q10/06393 A01B79/005 A01D41/127 G06Q10/0637 G06Q10/06375 G09B29/007

European: A01B79/00P G06Q10/00 G06Q10/06393

US: 1/1 701/213 701/213S 701/469 701/469S 701/50 701/50S 702/182 702/182S 705/7 705/7.39 705/7.390P 705/7P 707/100 707/104.1 707/E17.044 707/E17.044S 709/217 709/217S



Family:

Publication number	Publication date	Application number	Application date
AU2010282934 AA	20110217	AU20100282934	20100623
AU2010282934 BB	20131107	AU20100282934	20100623
BRPI1014190 A2	20160426	BR2010PI14190	20100623
CA2752888 AA	20110217	CA20102752888	20100623
EP2465064 A1	20120620	EP20100808492	20100623
EP2465064 A4	20140924	EP20100808492	20100623
US2010036696 AA	20100211	US20090539376	20090811
US2014249893 AA	20140904	US20140279091	20140515
US9152938 BB	20151006	US20090539376	20090811
WO11019453 A1	20110217	WO2010US39711	20100623

Priority:

US20080188562P 20080811 US20090539376 20090811 WO2010US39711 20100623
US20140279091 20140515 US20140941174P 20140218

Probable Assignee: MACHINERYLINK INC

Assignee(s): (std): FARMLINK LLC ; LANG JAY ; MACHINERYLINK INC ; MAYES WILLIAM C ; MORRIS LONDON

Inventor(s): (std): JAY LANG ; LONDON MORRIS ; LANG JAY ; MAYES WILLIAM C ; MORRIS LONDON ; MCCLURE ROBERT

Inventor(s): WILLIAM C MAYES

Agent(s): SPRUSON AND FERGUSON; GOWLING LAFLEUR HENDERSON LLP; LAWRENCE JOHN; BRYAN CAVE LLP; RIVERA PEDRO J

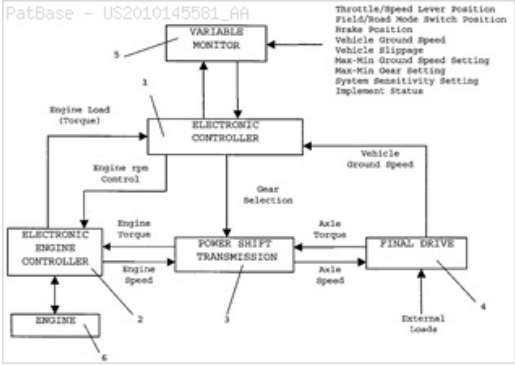
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Title: AUTOMATIC PRODUCTIVITY MANAGEMENT CONTROL WITH STANDARD POWER SHIFT TRANSMISSION

Abstract: Source: US2010145581A [EN] A system and method for managing the power of an engine-powered vehicle is provided. The power of the engine is managed in automatic vehicle speed mode by inputting the desired vehicle ground speed and a measured variable to an electronic controller, which automatically up-shifts the transmission and reduces engine speed to maintain a desired vehicle speed and reduce fuel consumption when a load on the vehicle is reduced and down-shifts the transmission and increases engine speed when the load is applied. The measured variable is (a) the position of a selector switch, which is positionable in a field mode for operating the vehicle in a field, including tillage applications under changing load conditions, and a road mode for operating the vehicle during road hauling or transportation, (b) the position of a brake and ground speed, (c) vehicle slippage and ground speed, (d) an operator set maximum and minimum ground speed, (e) an operator set maximum and minimum gear setting, (f) system sensitivity, and/or (g) change in implement status.

Classifications:

International (IPC 8-9): B60W10/00 B60W10/06 B60W10/10 B60W10/11 B60W30/14 B60W30/18 F16H59/60 G06F19/00 (Advanced/Invention); B60W50/00 F16H59/02 (Advanced/Non-invention); B60W10/00 B60W10/06 B60W10/10 (Core/Invention)
CPC: B60W10/06 B60W10/11 B60W30/143 B60W2540/04 B60W2710/0644 B60W2710/0666 B60W2710/1005 B60Y2200/221 F16H2059/0226 B60W30/1882
European: B60W30/188B
US: 701/50 701/50P 701/51 701/54 701/54P



Family:

Publication number	Publication date	Application number	Application date
EP2193968 A2	20100609	EP20090178370	20091208
EP2193968 A3	20130417	EP20090178370	20091208
EP2193968 B1	20161130	EP20090178370	20091208
US2010145581 AA	20100610	US20080329976	20081208
US2012179341 AA	20120712	US20120349458	20120112
US8121763 BB	20120221	US20080329976	20081208
US8554426 BB	20131008	US20120349458	20120112

Priority:

US20080329976 20081208 US20120349458 20120112

Probable Assignee: BLUE LEAF IP INC

Assignee(s): (std): CNH AMERICA LLC ; CNH IND ITALIA SPA ; CNH ITALIA SPA ; HOU YANMING

Assignee(s): CNH INDUSTRIAL ITALIA SPA ; BLUE LEAF IP INC ; CNH ITALIA S P A

Inventor(s): (std): HOU YANMING

Agent(s): CNH IP DEPARTMENT; CNH INDUSTRIAL IP DEPARTMENT; CNH AMERICA LLC,INTELLECTUAL PROPERTY LAW DEPARTMENT; CNH AMERICA LLC INTELLECTUAL PROPERTY LAW DEPARTMENT; SUE C

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Title: AUTOMATIC DETECTION OF MACHINE STATUS FOR FLEET MANAGEMENT

Abstract: Source: US2012253709A [EN] An automatic machine status detection system uses apparatus data from one or more sensors or machine components to determine a status for an agricultural machine. An automatic data unit onboard a machine can receive apparatus data and communicate it to a central management system. In an exemplary embodiment, a status determination module can receive the apparatus data, use the to make one or more state determinations, and based on the results of those determinations, determine an activity status for a machine. Engine state, motion state, heading state, implement state and PTO state can be used to determine that a machine has a status identified as Off, Idle, Traveling, Turning or Working. Machine status information can be provided to a user to improve operations efficiency and facilitate billing and administrative services.

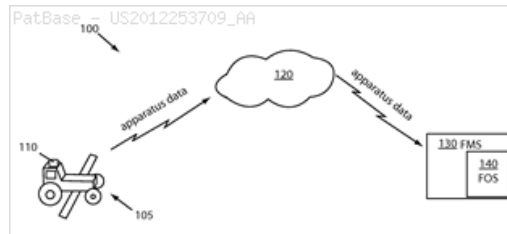
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G08G1/123 (Advanced/Invention)

CPC: G06Q10/06 G08G1/20 G07C5/008 G01D7/02 G01D21/00
G06F11/3065 G06F17/40 G06F19/00 G06Q99/00 G07C5/085

European: G07C5/00T G07C5/08R2 G08G1/20

US: 1/1 702/182 702/188 702/60

**Family:**

Publication number	Publication date	Application number	Application date
US2012253709 AA	20121004	US20110341500	20111230
US2012253743 AA	20121004	US20110341450	20111230
US2012253744 AA	20121004	US20110341475	20111230
US9269200 BB	20160223	US20110341475	20111230
WO12092588 A1	20120705	WO2011US68174	20111230
WO12092592 A1	20120705	WO2011US68182	20111230
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Priority:

US20100428692P 20101230	US20100428693P 20101230	US20100428695P 20101230
US20110341450 20111230	US20110341475 20111230	US20110341500 20111230

Probable Assignee: AGCO CORP

Assignee(s): (std): AGCO CORP ; RIEGGER LORENZ ; SCHMIDT LEE ; SCHMIDT LEE A

Inventor(s): (std): RIEGGER LORENZ ; SCHMIDT LEE ; SCHMIDT LEE A

Agent(s): LAFFERTY WM BROOK ET AL; LAFFERTY BROOK WM ET AL

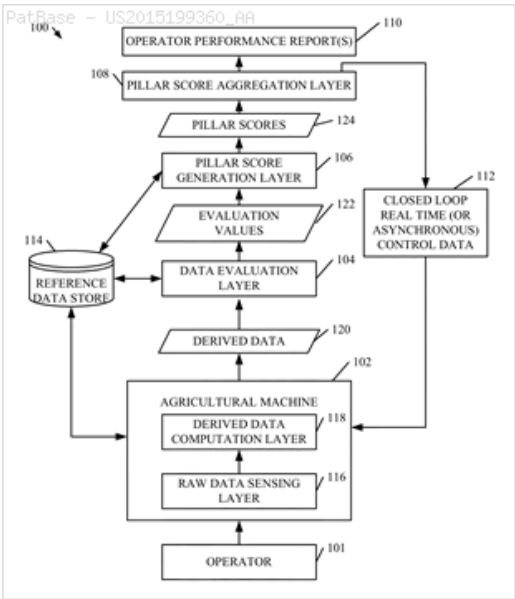
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Title: OPERATOR PERFORMANCE RECOMMENDATION GENERATION

Abstract: Source: US2015199360A [EN] A set of data is received. The data is indicative of sensed parameters on a mobile machine. The data is evaluated against a set of actionable conditions to determine the degree of fulfillment of each condition. A recommendation for changing the operation of the mobile machine is identified based on the degree of fulfillment. An output is generated based on the recommendation.

Classifications:

International (IPC 8-9): G06F15/00 G06F17/30 G06Q10/06 G06Q50/02 (Advanced/Invention)
CPC: G06Q10/0639 G06F17/30973 G06Q10/06393 G06F17/30386 G06Q10/06398 G06Q50/02 G06F17/3053 G06F17/30554
US: 705/7.39 705/7.42 707/722 707/723 707/740



Family:

Publication number	Publication date	Application number	Application date
BR112016013737 A2	20170808	BR20161113737	20141210
CN105814552 A	20160727	CN201480068108	20141210
EP3095039 A1	20161123	EP20140879223	20141210
EP3095039 A4	20170621	EP20140879223	20141210
US2015199360 AA	20150716	US20140271077	20140506
US2015199630 AA	20150716	US20140445699	20140729
US2015199637 AA	20150716	US20140155023	20140114
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US2016078391 AA	20160317	US20150925237	20151028
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WO15108633 A1	20150723	WO2014US69541	20141210

Priority:

US20140155023 20140114 US20140271077 20140506 US20140445699 20140729
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Probable Assignee: DEERE AND CO

Assignee(s): (std): DEERE AND CO

Inventor(s): (std): BLANK SABASTIAN ; REID JOHN F ; PFEIFFER DOHN W ; FOESSEL ALEX D ; DEUTSCH TIMOTHY A ; BLANK SEBASTIAN

Inventor(s): DOHN W PFEIFFER ; JOHN F REID ; SEBASTIAN BLANK ; TIMOTHY A DEUTSCH ; ALEX D FOESSEL

Agent(s): HOLST SOENKE; KELLY HOLT AND CHRISTENSON PLLC; JOSEPH R; GUPTA ANAND

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

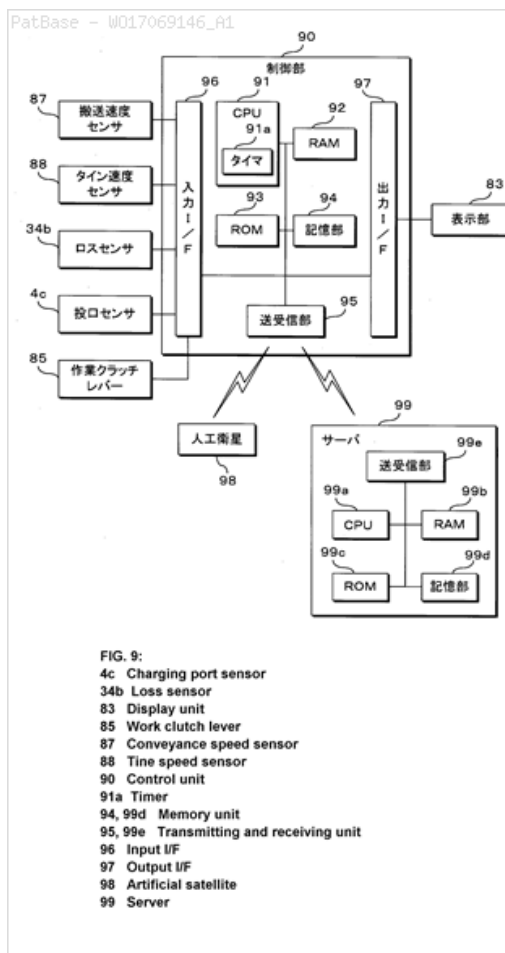
Title: MAPPING SYSTEM, MAPPING DEVICE AND COMPUTER PROGRAM

Abstract: Provided is a mapping system characterized by comprising: a combine harvester that is provided with a reaping part (3) which is attached to a travelling part (1) that travels a field and which reaps grain culms of the field, a threshing device (2) which threshes the grain culms reaped by the reaping part, a discharge amount detection unit (4c) which detects, by means of grain collision, the discharge amount of grain discharged externally from the threshing device, positioning units (90, 98) which measure the position of the travelling part, and a transmission unit (95) which transmits the measurement results from the positioning units and the detection results from the discharge amount detection unit; a receiving unit (99e) which receives the measurement results and detection results transmitted by the transmission unit; and a discharge amount mapping unit (99) which, on the basis of the measurement results and detection results received by the receiving unit, associates the discharge amount and a grain reaping position corresponding to the discharge amount, and maps the discharge amount.

Classifications:

International (IPC 8-9): A01D41/127 A01D41/14 A01D69/00 A01F12/18 A01F12/60 (Advanced/Invention)

CPC: A01D41/127 A01D41/14 A01F12/18 A01F12/60



Family:

Publication number	Publication date	Application number	Application date
JP2017077204 A2	20170427	JP20150206655	20151020
KR20180019218 A	20180223	KR20187001949	20161019
WO17069146 A1	20170427	WO2016JP80941	20161019

Priority:

JP20150206655 20151020 WO2016JP80941 20161019

Probable Assignee: YANMAR CO LTD

Assignee(s): (std): YANMAR CO LTD ; YANMAR KK

Assignee(s): YANMAR CO

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Agent(s): KOHNO TAKAO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT KE KG KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CLOSED-LOOP COMBINE HEADER HEIGHT CONTROL

Abstract: Source: US4136508A [EN] A closed-loop height control for the header of a combine harvester permits adjustment of height setpoint and deadband from the operator's platform without stopping the combine. A variable capacitance is rotated in accordance with minimum clearance between header and ground to generate a continuous electrical header height signal which is compared to a setpoint signal indicative of desired header height to derive a height error signal whose value is at a null level when actual header height is equal to desired height indicated by the setpoint signal and which deviates in both magnitude and direction from the null level as a function of the variation between actual header height and setpoint height. Raise and lower command signals are derived in response to a predetermined deviation of the height error signal in opposite directions respectively from the null level by first and second Schmitt trigger circuits having switching levels which respectively are greater than and less than the null value. A logic circuit controls transmittal of the raise and lower command signals to electrohydraulic power means for raising and lowering the header, and the operator need only actuate a single raise-lower switch at the operator's platform to select whether the logic circuit is in an automatic mode in which the command signals are transmitted or a standby mode in which they are blocked from the power means.

Classifications:

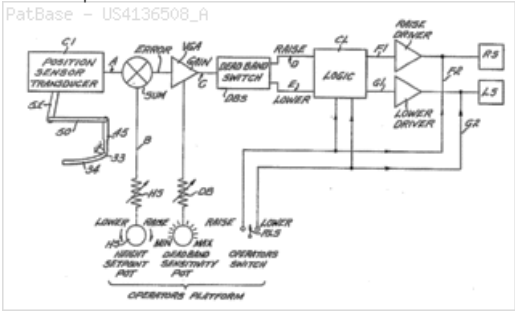
International (IPC 8-9): A01D41/14 (Advanced/Invention); A01D41/00 (Core/Invention)

International (IPC 1-7): A01D75/28

CPC: A01D41/141 Y10S56/15

European: A01D41/14B

US: 56/10.2E 56/208 56/DIG.15



Family:

Publication number	Publication date	Application number	Application date
US4136508 A	19790130	US19770758064	19770107

Priority:

US19770758064 19770107

Probable Assignee: ALLIS CHALMERS

Assignee(s): (std): ALLIS CHALMERS

Assignee(s): ALLIS CHALMERS CORP ; CONNECTICUT NATIONAL BANK A NATIONAL BANKING ASSOC ; DEUTZ ALLIS CORP ; ITT COMMERCIAL FINANCE CORP ; DEUTSCHE FINANCIAL SERVICES CORP ; MASSEY FERGUSON ACQUISITION CORP ; MASSEY FERGUSON GROUP LTD ; CONNECTICUT NATIONAL BANK A NATIONAL BANKING ASSOCIATION TRUSTEE AS ; DEUTZ ALLIS A CORP OF DE CORP ; ITT COMMERCIAL FINANCE CORP COLLATERAL AGENT AS ; WOODS KATHLEEN D ; WHIRLPOOL FINANCIAL CORP ; MASSEY FERGUSON MFG ; MASSEY FERGUSON SA ; MASSEY FERGUSON LTD ; WOODS KATHLEEN D TRUSTEE AS ; MASSEY FERGUSON MFG LTD ; MASSEY FERGUSON UNITED KINGDOM LTD ; WHIRLPOOL FINANCIAL A DE CORP CORP ; AGCO CORP

Inventor(s): (std): COLEMAN MARTIN W ; NORTHUP EDWIN M