

Title (en)

Dual cylinders for effecting tilt and pitch functions of a dozer blade

Title (de)

Doppelzylinder zur Bewirkung der Neigungs- und Spitzenfunktionen einer Baggerschaufel

Title (fr)

Deux cylindres servant aux fonctions d'inclinaison et de pas d'une lame de remblayage

Publication

**EP 2578754 A2 20130410 (EN)**

Application

**EP 12187472 A 20121005**

Priority

US 201113269157 A 20111007

Abstract (en)

A blade 50 of a work vehicle 10 is coupled to the forward ends of right and left push-beams 32, 34 of a push frame 30 for having the blade pitch adjusted about a transverse axis 66 defined by pivotal connections of the blade 50 with the push-beams 32, 34; and right and left push-beam cylinders 68, 70 are provided between the push-beams 32, 34 and blade 50 for effecting pitch adjustments and for effecting tilt adjustments of the blade 50 about a longitudinal axis 80 located midway between the push-beams 32, 34. The push frame 30 is mounted for pivoting vertically about a second transverse axis 40 so as to adjust the height of the blade 50, with a pair of lift cylinders 82 being coupled between the work vehicle 10 and the blade 50 for effecting this adjustment. An electro-hydraulic control system 100 including an electronic controller 130 is provided for effecting individual or simultaneous control of the push-beam cylinders 68, 70 for effecting blade tilt and pitch adjustments in accordance with operator inputs, with position feedback being provided by cylinder position sensors 140, 142, 144, 146.

IPC 8 full level

**E02F 3/76** (2006.01); **E02F 3/84** (2006.01)

CPC (source: EP US)

**E02F 3/7618** (2013.01 - EP US); **E02F 3/845** (2013.01 - EP US)

Citation (applicant)

- US 3184869 A 19650525 - OLSEN NORMAN G
- US 5996703 A 19991207 - YAMAMOTO SHIGERU [JP], et al

Cited by

CN106759589A; US2020407951A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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**EP 2578754 A2 20130410**; JP 2013083143 A 20130509; US 2013087351 A1 20130411

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**EP 12187472 A 20121005**; JP 2012180013 A 20120815; US 201113269157 A 20111007