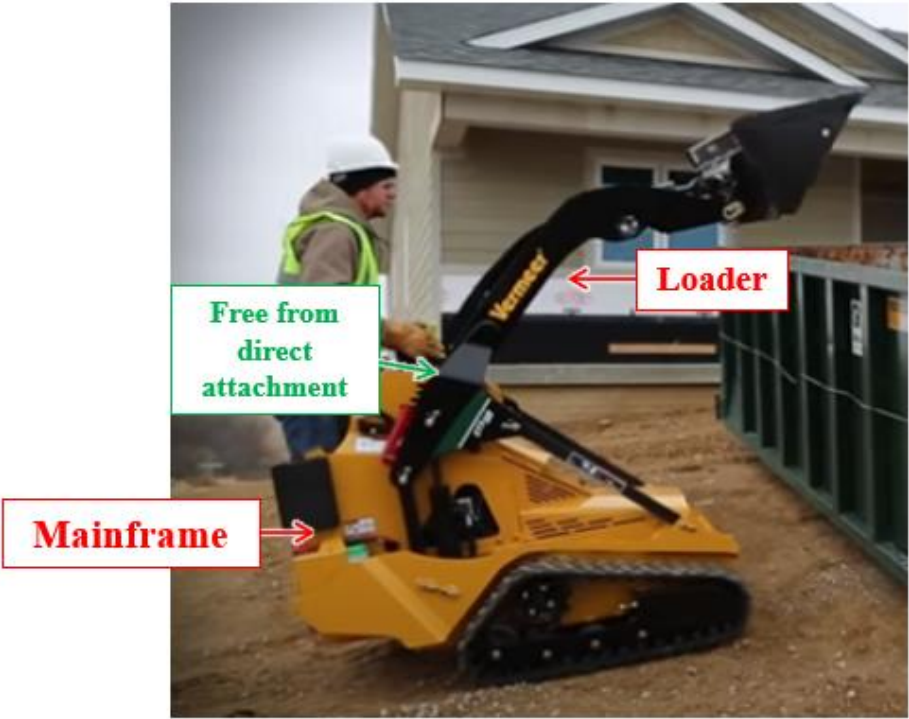


U.S. Patent 9,975,750

Comparing the Vermeer CTX50 to Independent Claims 1 and 19

Claim 1 of the '750 Patent	Vermeer CTX50
1. A compact tool carrier configured for standing operator control and having a longitudinal axis and a mass of less than about 1500 kg, the compact tool carrier comprising:	A yellow Vermeer CTX50 Mini Skid Steer loader is shown in operation. A worker in a white hard hat and a high-visibility yellow vest is standing on the machine, operating the controls. The loader's arm is raised, and it is positioned next to a green metal structure, possibly a dumpster or a large container. The background shows a residential building with a gabled roof. CTX50 MINI SKID STEER GENERAL Length: 75" (190.5 cm) Width: 35.5" (90.2 cm) Height: 54.5" (138.4 cm) Weight: 2100 lb (952.5 kg) Hinge pin height: 72" (182.9 cm) Ground clearance: 6" (15.2 cm) Ground pressure: 4.5 psi (31.0 kPa)
a loader having an arm, the loader being adapted to carry a tool;	A yellow Vermeer CTX50 Mini Skid Steer loader is shown in operation. A worker in a white hard hat and a high-visibility yellow vest is standing on the machine, operating the controls. The loader's arm is raised, and it is positioned next to a green metal structure, possibly a dumpster or a large container. The background shows a residential building with a gabled roof. Red arrows point to the 'Arm' and 'Tool' components of the loader.

Claim 1 of the '750 Patent	Vermeer CTX50
a mainframe for supporting the loader, the mainframe having a first side and a second side,	 Mainframe First Side  Mainframe Second Side

Claim 1 of the '750 Patent	Vermeer CTX50
the loader being free from direct attachment to the mainframe;	

Claim 1 of the '750 Patent	Vermeer CTX50
a first linkage pivotally attached to the first side of the mainframe at a first pivot point and pivotally attached to the loader arm at a second pivot point;	 This diagram shows a side view of the Vermeer CTX50 loader arm assembly. A yellow tracked loader is shown with its black loader arm raised. A red arrow points to the 'Loader arm' with the text 'Loader arm' in a red box. A green arrow points to the 'First pivot point' where the loader arm is attached to the mainframe, with the text 'First pivot point' in a green box. Another green arrow points to the 'Second pivot point' where the 'First linkage' is attached to the loader arm, with the text 'Second pivot point' in a green box. A red arrow points to the 'First linkage' with the text 'First linkage' in a red box. The background shows a residential area with houses and a hill.
a second linkage pivotally attached to the first side of the mainframe at a third pivot point and pivotally attached to the loader arm at a fourth pivot point;	 This diagram shows a side view of the Vermeer CTX50 loader arm assembly, similar to the one above. A red arrow points to the 'Loader arm' with the text 'Loader arm' in a red box. A green arrow points to the 'Third pivot point' where the 'Second linkage' is attached to the mainframe, with the text 'Third pivot point' in a green box. Another green arrow points to the 'Fourth pivot point' where the 'Second linkage' is attached to the loader arm, with the text 'Fourth pivot point' in a green box. A red arrow points to the 'Second linkage' with the text 'Second linkage' in a red box. The background shows a residential area with houses and a hill.

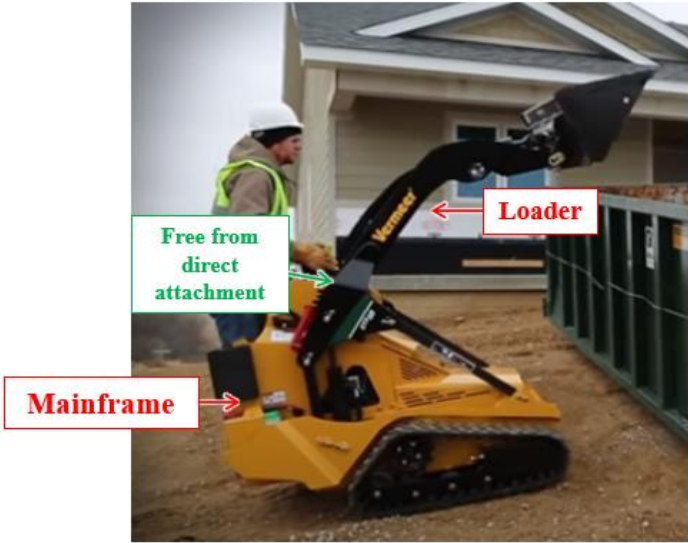
Claim 1 of the '750 Patent	Vermeer CTX50
an actuator directly pivotally attached to the first side of the mainframe at a fifth pivot point and directly pivotally attached to the loader arm at a sixth pivot point, the fifth pivot point being distinct from the first pivot point and the third pivot point;	 The top photograph shows a Vermeer CTX50 skid steer loader in operation on a dirt site. A worker in a hard hat and safety vest is standing on the machine. Four labels with arrows point to specific components: 'Loader arm' (red box), 'Actuator' (red box), 'Fifth pivot point' (green box), and 'Sixth pivot point' (green box). The bottom photograph shows the same machine from a different angle, with a worker operating it. A red box labeled 'Actuator' points to the hydraulic cylinder connecting the loader arm to the mainframe.

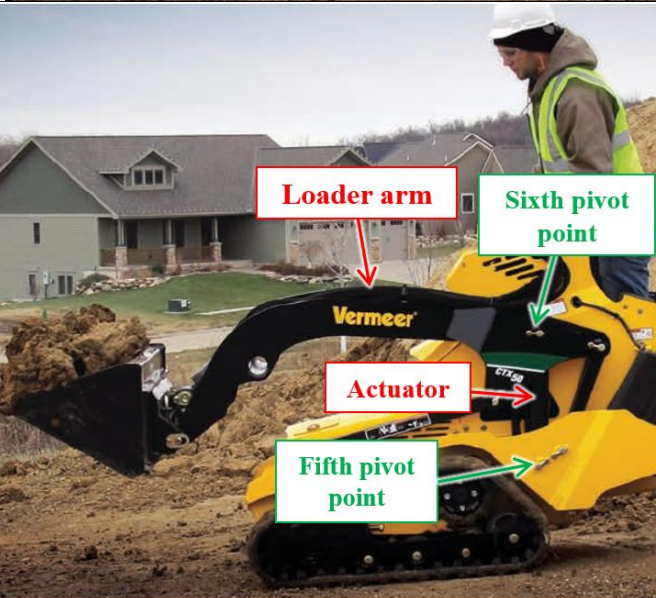
Claim 1 of the '750 Patent	Vermeer CTX50
a control station having operator controls for propelling the compact tool carrier forward and for raising and lowering the loader, the control station being mounted toward the rear of the compact tool carrier;	 Control station having operator controls
an operator platform for standing operation of the operator controls of the control station; and	 Operator platform

Claim 1 of the '750 Patent	Vermeer CTX50
an engine disposed forward of the operator platform relative to the longitudinal axis.	 The top photograph is a close-up view of the engine compartment of the Vermeer CTX50. A red arrow points from a label 'Engine' to the engine block. The bottom photograph shows the machine in operation on a construction site. A worker is standing on the operator platform. Two red arrows point from labels 'Engine (interior)' and 'Operator platform' to their respective parts on the machine.

Claim 19 of the '750 Patent	Vermeer CTX50
19. A compact tool carrier having a longitudinal axis and comprising:	
a loader adapted to carry a tool;	

Claim 19 of the '750 Patent	Vermeer CTX50
a mainframe for supporting the loader, the mainframe having a first side and a second side,	 Mainframe First Side  Mainframe Second Side

Claim 19 of the '750 Patent	Vermeer CTX50
the loader being free from direct attachment to the mainframe;	 A photograph of a yellow Vermeer CTX50 compact loader. A worker in a hard hat and safety vest is operating it. Red arrows point to the 'Mainframe' (the base of the machine) and the 'Loader' (the bucket). A green arrow points to the connection between the mainframe and the loader arm, labeled 'Free from direct attachment'.
a first linkage pivotally attached to the first side of the mainframe at a first pivot point and pivotally attached to the loader at a second pivot point;	 A photograph of the same Vermeer CTX50 loader from a different angle. Red arrows point to the 'Loader arm' and the 'First linkage' (the arm connecting the bucket to the mainframe). Green arrows point to the 'First pivot point' (where the first linkage meets the mainframe) and the 'Second pivot point' (where the first linkage meets the loader arm).

Claim 19 of the '750 Patent	Vermeer CTX50	
a second linkage pivotally attached to the first side of the mainframe at a third pivot point and pivotally attached to the loader at a fourth pivot point;		 This diagram illustrates the mechanical components of the Vermeer CTX50 loader as defined in Claim 19 of the '750 Patent. The image shows a yellow tracked loader with a black bucket. A worker in a high-visibility vest and hard hat is operating the machine. Red arrows point to the 'Loader arm' and the 'Second linkage'. Green arrows point to the 'Third pivot point' and the 'Fourth pivot point'. The background shows a residential area with houses and a grassy lawn.
an actuator pivotally attached to the first side of the mainframe at a fifth pivot point and directly pivotally attached to the loader at a sixth pivot point;		 This diagram illustrates the mechanical components of the Vermeer CTX50 loader as defined in Claim 19 of the '750 Patent, specifically focusing on the actuator. The image shows the same yellow tracked loader with a black bucket. A worker in a high-visibility vest and hard hat is operating the machine. Red arrows point to the 'Loader arm' and the 'Actuator'. Green arrows point to the 'Fifth pivot point' and the 'Sixth pivot point'. The background shows a residential area with houses and a grassy lawn.

Claim 19 of the '750 Patent	Vermeer CTX50
	 A photograph of a yellow Vermeer CTX50 compact track loader. A worker in a white hard hat and a high-visibility vest is operating the machine. A red rectangular box highlights a component on the side of the machine, labeled 'Actuator' in a red-bordered white box.
a drive mechanism for propelling the compact tool carrier over a supporting surface, the drive mechanism having a drive sprocket defining a rotational axis R, the compact tool carrier having a bottom at which the drive mechanism contacts the supporting surface,	 A photograph of a yellow Vermeer CTX50 compact track loader operating on a dirt surface. A worker in a white hard hat and a high-visibility vest is operating the machine. A red-bordered white box labeled 'Drive mechanism' points to the rear of the machine. A green-bordered white box labeled 'Drive sprocket' points to a sprocket on the track. A blue-bordered white box labeled 'Rotational axis' points to a dashed blue line representing the axis of rotation.

Claim 19 of the '750 Patent	Vermeer CTX50
the rotational axis R and the bottom of the compact tool carrier being separated by a vertical distance D1, the rotational axis R and a bottom of the first side of the mainframe being separated by a vertical distance D5, the rotational axis R and each of the first, third, and fifth pivot points being separated by a vertical distance, the vertical distance between the rotational axis R and the first pivot point being less than 1.5 times D1, the vertical distance between the rotational axis R and the third pivot point also being less than 1.5 times D1, the vertical distance between the rotational axis R and the fifth pivot point also being less than 1.5 times D1,	Distances between each of the first, second, and third pivot points and rotational axis is less than 1.5 times D1  The diagram shows a side profile of a yellow Vermeer CTX50 skid steer loader. Several horizontal purple lines are drawn across the machine to indicate vertical distances. A large red double-headed arrow labeled 'D1' spans from the bottom of the mainframe to the top of the boom. A smaller red double-headed arrow labeled 'D5' spans from the bottom of the mainframe to the rotational axis of the boom. Three small red double-headed arrows are positioned between the first, second, and third pivot points of the boom, indicating distances less than 1.5 times D1.

Claim 19 of the '750 Patent	Vermeer CTX50
the first side of the mainframe comprising a forward-most pivot point, the first pivot point, the third pivot point, or the fifth pivot point being the forward-most pivot point, the vertical distance between the rotational axis R and the forward-most pivot point being less than twice D5;	Distance between forward-most pivot point and rotational axis is less than twice D5  The diagram shows a side profile of a yellow Vermeer CTX50 skid steer loader. A horizontal purple line represents the rotational axis R, passing through the center of the rear drive sprocket. Another horizontal purple line represents the forward-most pivot point, located at the front of the mainframe where the lift arms are pivoted. A vertical red double-headed arrow labeled 'D5' indicates the vertical distance between these two horizontal lines. The text above the diagram states that this distance is less than twice D5.

Claim 19 of the '750 Patent	Vermeer CTX50		
a control station having operator controls for propelling the compact tool carrier forward and for raising and/or lowering the loader, the control station being mounted toward the rear of the compact tool carrier;		 A photograph of a yellow Vermeer CTX50 compact track loader. An operator in a high-visibility vest and hard hat is standing on the rear platform, operating the controls. A red box with the text "Control station having operator controls" points to the control area on the rear of the machine.	
an operator platform for standing operation of the operator controls of the control station; and		 A photograph of the same Vermeer CTX50 compact track loader. The operator is standing on the rear platform. A red box with the text "Operator platform" points to the standing area on the rear of the machine.	

Claim 19 of the '750 Patent	Vermeer CTX50
an engine disposed forward of the operator platform relative to the longitudinal axis.	 The figure consists of two photographs of a Vermeer CTX50 skid steer loader. The top photograph is a close-up view of the engine compartment, showing a large black fan and various mechanical components. A red arrow points from a label 'Engine' to the engine. The bottom photograph shows the machine in operation on a dirt surface, with a worker in a yellow safety vest and white hard hat standing on the operator platform. A red arrow points from a label 'Engine (interior)' to the engine area, and another red arrow points from a label 'Operator platform' to the platform.