5-6-2003

Universal mounting bracket for laser targeting and feedback system

Richard J. Kelin II

US006557815B1

(12) **United States Patent**
Klein, II

(10) **Patent No.: US 6,557,815 B1**
(45) **Date of Patent: May 6, 2003**

(54) **UNIVERSAL MOUNTING BRACKET FOR LASER TARGETING AND FEEDBACK SYSTEM**

(75) Inventor: **Richard J. Klein, II**, Waterloo, IA (US)

(73) Assignee: **University of Northern Iowa Research Foundation**, Cedar Falls, IA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/730,241**

(22) Filed: **Dec. 5, 2000**

(51) **Int. Cl.**[7] **F16M 13/00**

(52) **U.S. Cl.** **248/635**; 248/609; 248/620; 239/346

(58) **Field of Search** 248/635, 229.16, 248/294.1, 309.2, 292.14, 183.3, 609, 620, 346.03, 229.12, 229.17, 632, 608; 239/346, 289

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,498,759 A		6/1924	Schmidt	
2,115,653 A	*	4/1938	Snyder	248/635
2,488,789 A		11/1949	Williams	299/88
3,155,320 A		11/1964	Jones	239/289
3,784,804 A		1/1974	Sabatellie et al.	240/2
4,291,839 A		9/1981	Brett	239/289
4,583,694 A		4/1986	Williams et al.	239/690
4,899,937 A		2/1990	Haruch	239/289
5,069,389 A		12/1991	Bitsakos	239/289
5,090,650 A		2/1992	Donaldson et al.	248/183
5,134,798 A		8/1992	Lee	42/100
5,251,822 A	*	10/1993	Wang	239/346
5,303,896 A	*	4/1994	Sterka	244/54
5,335,893 A	*	8/1994	Opp	248/632
5,366,200 A	*	11/1994	Scura	248/632
5,566,047 A	*	10/1996	Kahn et al.	174/138 G
5,590,484 A		1/1997	Mooney et al.	42/100
5,590,486 A		1/1997	Moore	42/103
5,598,972 A		2/1997	Klein, II et al.	239/1
5,757,498 A		5/1998	Klein, II et al.	356/375
5,785,115 A	*	7/1998	Laveran	165/149
5,810,258 A		9/1998	Wu	239/346
5,857,625 A		1/1999	Klein et al.	239/289
5,868,840 A		2/1999	Klein, II et al.	118/300
5,951,296 A		9/1999	Klein	434/84
5,959,642 A	*	9/1999	Fujioka et al.	248/635

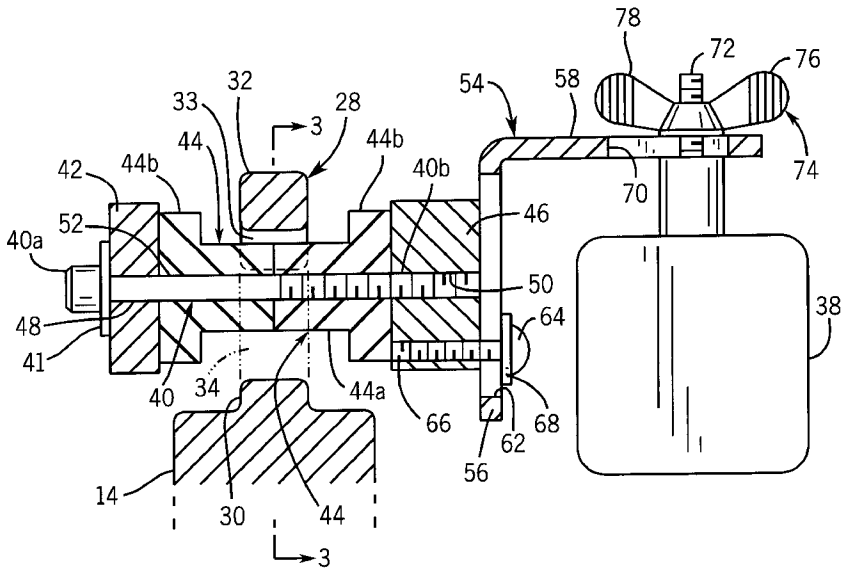
* cited by examiner

Primary Examiner—Anita King
Assistant Examiner—Tan Le
(74) *Attorney, Agent, or Firm*—Andrus, Sceales, Starke & Sawall, LLP

(57) **ABSTRACT**

A support bracket for mounting a device such as a laser targeting and feedback system to a spray gun. The bracket includes a bolt having a threaded end, a first collar disposed on the bolt opposite the threaded end and a second collar threadably engaged with the threaded end of the bolt. A compressible member is disposed on the bolt between the collars. Opposite the compressible member, a support arm used to support the device is attached to the second collar. The bracket is engageable with a portion of the spray gun body and is engaged therewith by deflecting the compressible member between the collars such that the compressible member frictionally engages the spray gun. The use of the compressible member to secure the bracket to the hook allows the bracket to be utilized with spray guns having various configurations so long as the spray gun incorporates a portion on the spray gun body that is engageable by the compressible member.

18 Claims, 4 Drawing Sheets



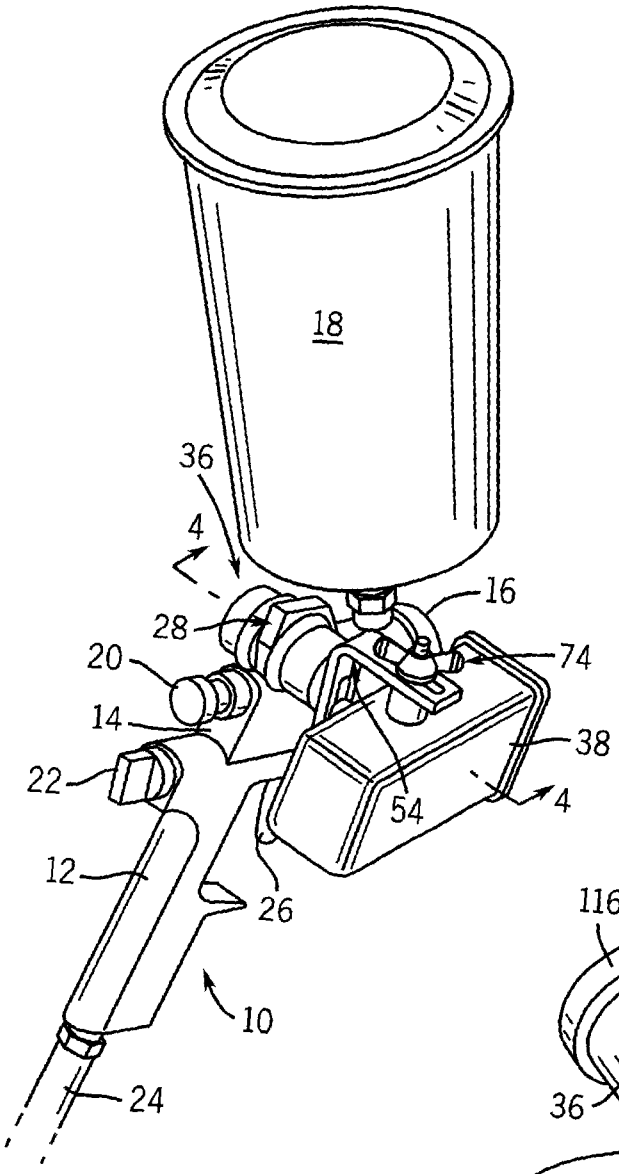

18
36
4
16
28
74
20
14
38
22
54
4
12
26
10
24

FIG. 1

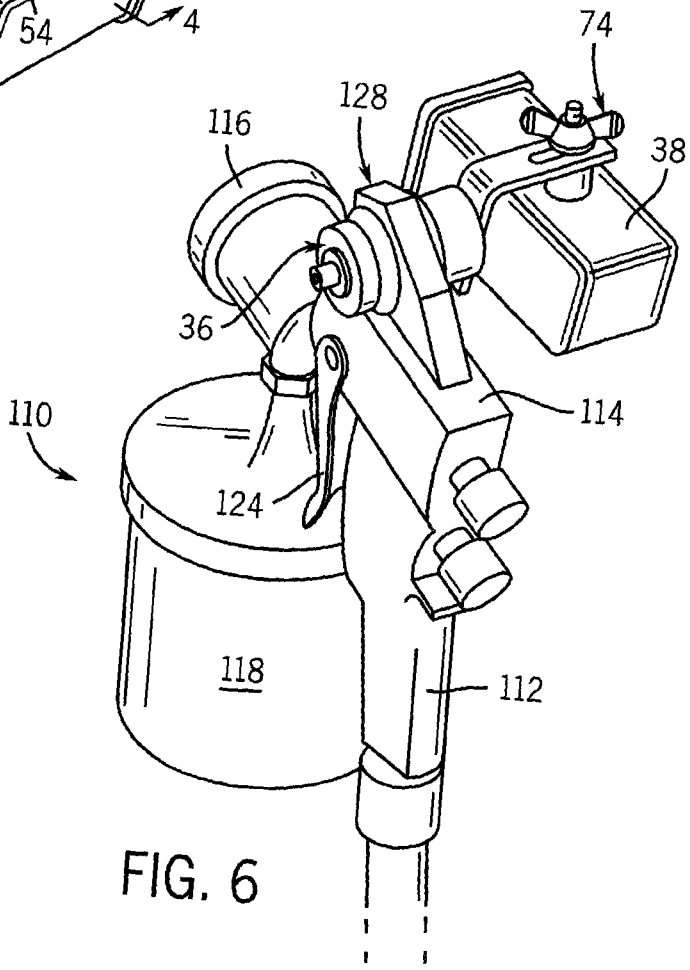

74
128
116
38
36
114
110
124
118
112

FIG. 6

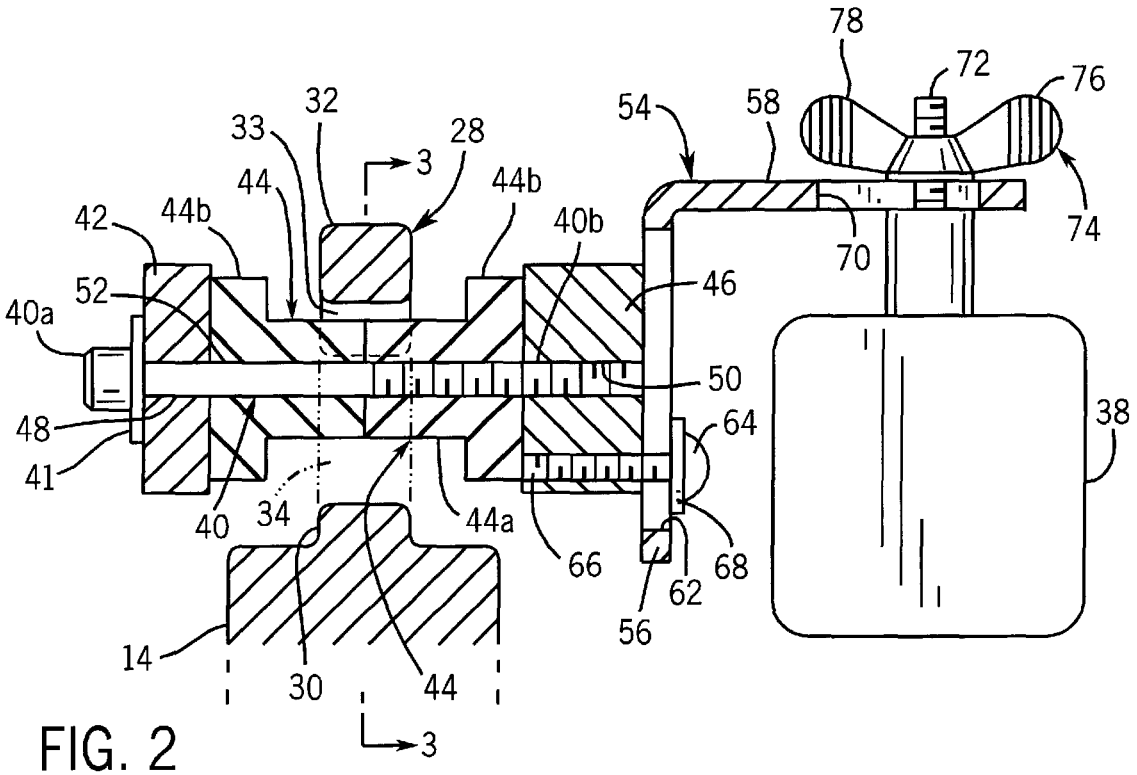

78
72
76
54
58
32
33
28
3
44
44b
42
44b
40b
74
70
46
52
40a
50
38
64
48
41
40
34
44a
66
68
62
56
14
30
44
3

FIG. 2

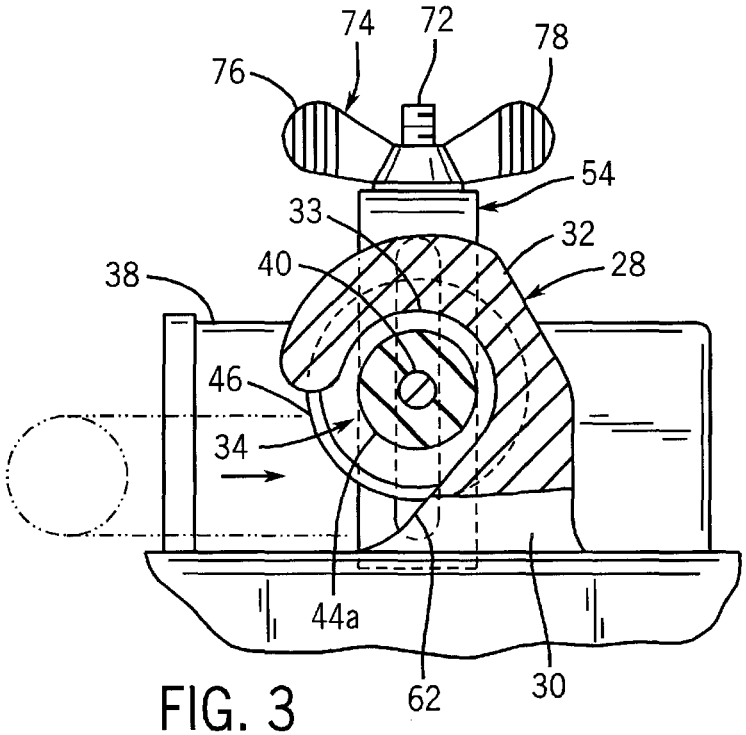

74
72
78
76
54
33
32
40
28
38
46
34
44a
62
30

FIG. 3

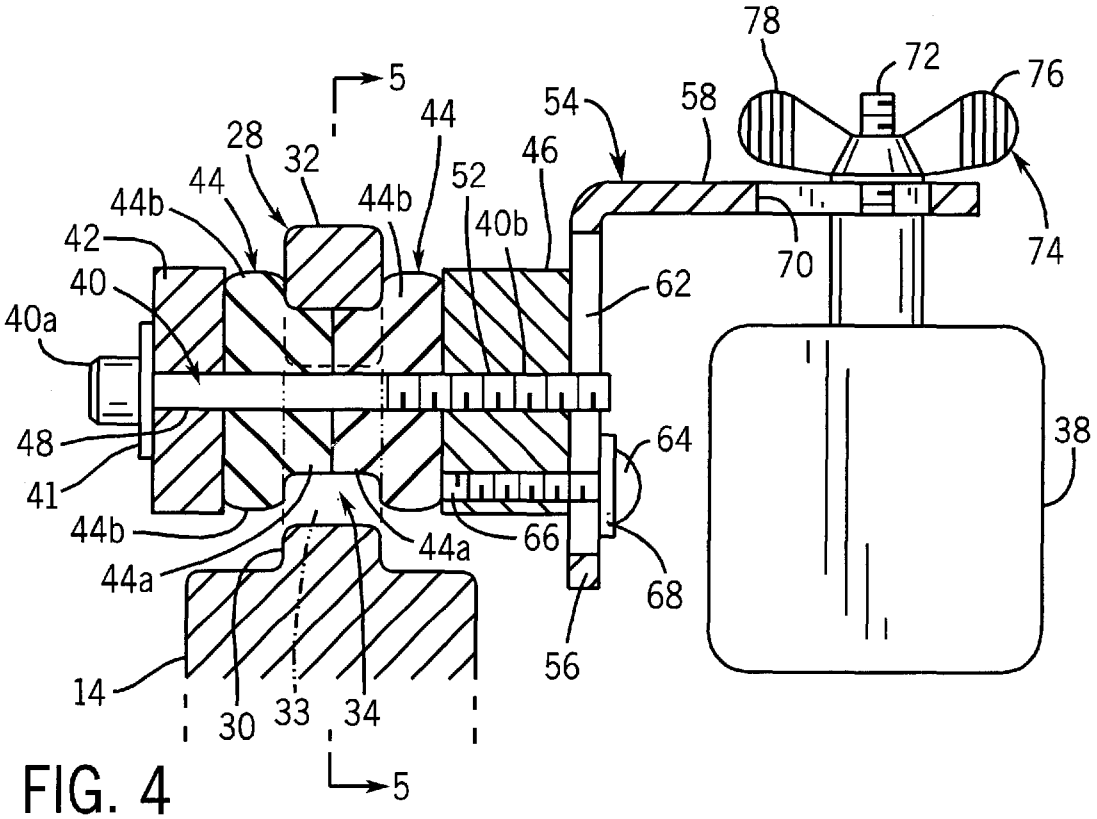

78
72
76
5
54
58
28
32
44
44
46
52
44b
44b
40b
42
70
74
40
62
40a
48
64
38
41
44b
66
44a
44a
68
14
56
30
33
34
5

FIG. 4

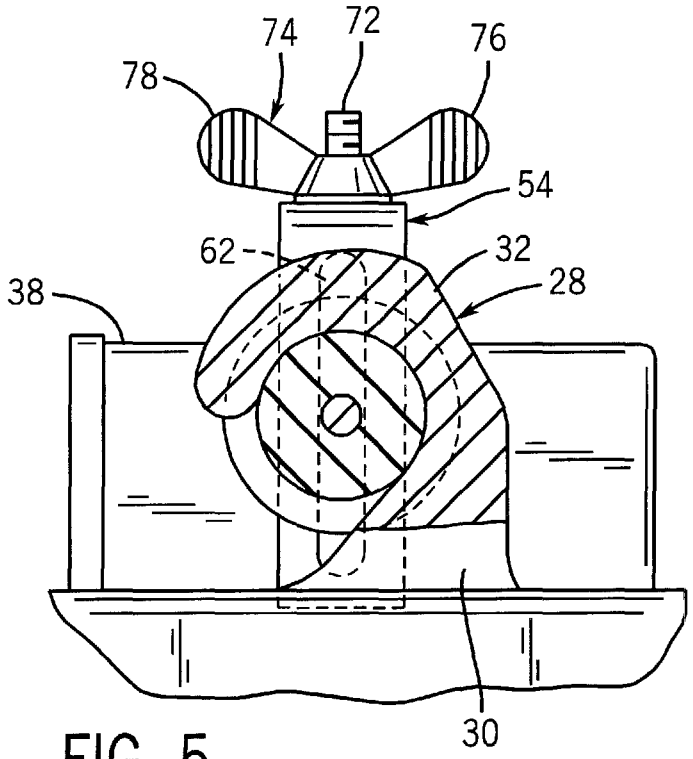

74
72
76
78
54
62
32
28
38
30

FIG. 5

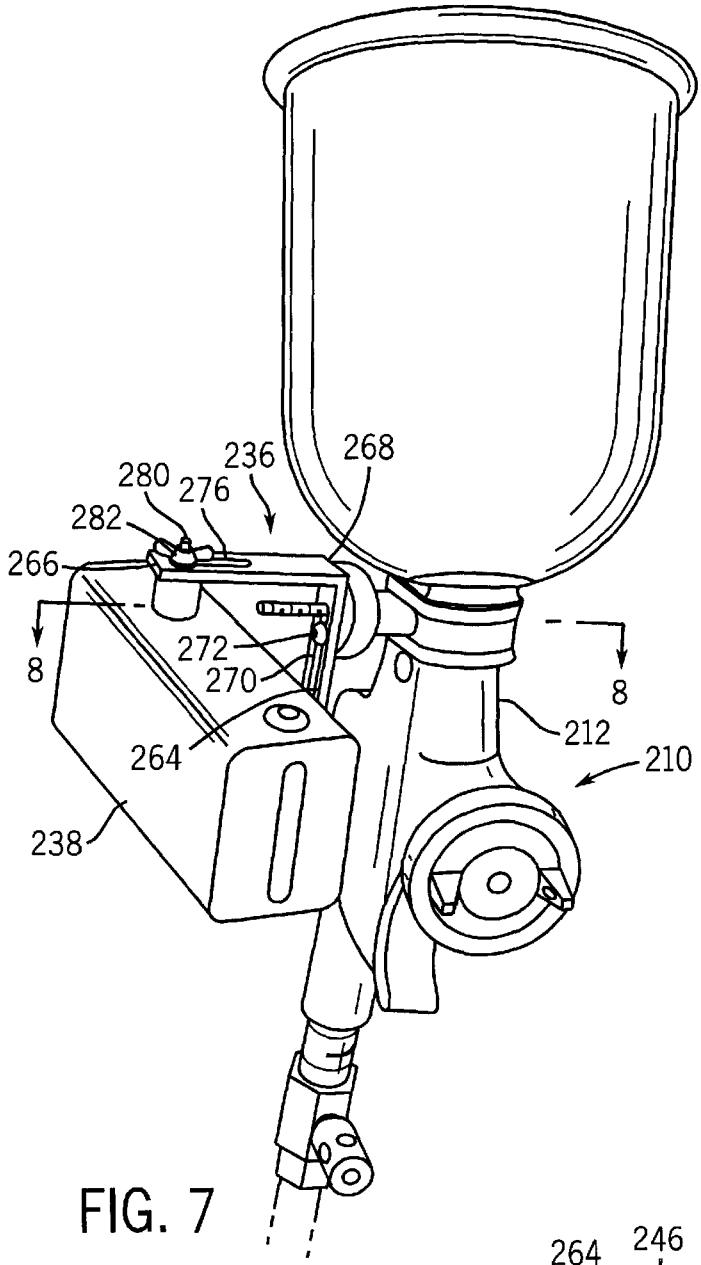

236
268
280
276
282
266
8
272
270
8
212
264
210
238

FIG. 7

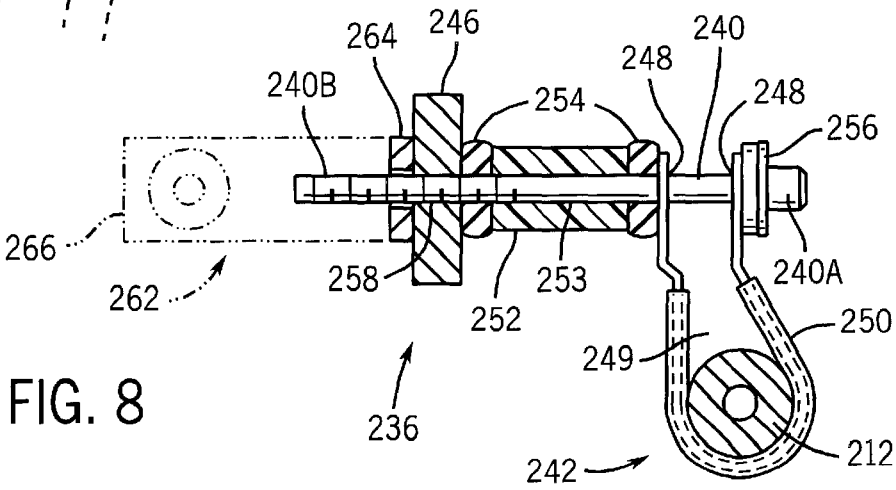

264
246
240
248
240B
254
248
256
266
262
258
253
240A
252
250
249
236
212
242

FIG. 8

UNIVERSAL MOUNTING BRACKET FOR LASER TARGETING AND FEEDBACK SYSTEM

FIELD OF THE INVENTION

The present invention relates to spray guns, such as paint spray guns, and more specifically to mounting brackets for attaching items to the spray gun.

BACKGROUND OF THE INVENTION

Spray guns have long been used to coat objects with a liquid spray, such as paint, varnish, etc. The spray gun allows a pressurized stream of the liquid spray coating to be applied to the object in a quick and easy manner.

With many of these coatings, it is important to apply the coating evenly to the surface to avoid overspray of the coating and/or leaving uncoated sections on the surface of the object. In order to apply the coating evenly over the entire surface of the object, in many instances it is necessary to position the spray gun a optimum distance from the object to ensure the proper coverage of the object with the coating. However, because spray guns are normally manually operated, variations in the distance between the spray gun and the surface of the object to be coated during the coating process are usually unavoidable.

To reduce the detrimental effects of this distance variation, devices have been developed that effectively measure the distance between the tip of the spray gun and the object surface to ensure that the spray gun is positioned at the optimal distance from the surface, helping ensure proper coverage of the object with the coating. One such device is a laser targeting and feedback device that can be mounted directly to the spray gun.

However, due to the numerous configurations of the spray guns currently in use, a number of different mounting assemblies have resulted that each secure a laser targeting feedback system to a particular spray gun design. For example, Klein, II et al. U.S. Pat. No. 5,757,498 discloses an optical spray coating monitoring system and method. This system includes a sensor head including a bracket used to removably attach the sensor head to a boom extending from the spray gun. The bracket includes a pair of downwardly depending flanges adapted to receive and engage the boom and including adapted to receive a threaded bolt beneath the boom. When the bracket is properly positioned about the boom, a nut threadably engaged to one end of the bolt is tightened on the bolt to compress the bracket into engagement with the boom to fixedly secure the sensor head on the spray gun.

Similar arrangements for other mounting assemblies used to secure other types of devices to spray guns can be found in Sabatelli et al. U.S. Pat. No. 3,784,804 and Brett U.S. Pat. No. 4,291,839. In each of these patents, the mounting assembly is adapted specifically for use with a certain type of paint spray gun configuration, limiting the use of the mounting assembly to that particular gun configuration. As a result, when using a device incorporating a specific mounting assembly, including a laser targeting and feedback system, use of that device is limited to paint spray guns having a configuration compatible with that particular mounting assembly. Furthermore, as each mounting assembly disclosed in the above-mentioned patents utilizes the frictional engagement of a clamping bracket with the spray gun, in many cases the bracket can slide or rotate with respect to the spray gun, thereby placing the device out of alignment with the spray gun. If the device is a laser targeting system, any movement of the device will result in the coating being applied to the object in a less than optimal manner.

Therefore, it is desirable to develop a mounting bracket that can securely mount a device such as a laser targeting and feedback system to a spray gun and is capable of being utilized with spray guns having a number of different configurations.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a mounting bracket that can be used with spray guns of varying configurations to support a device, such as a laser targeting and feedback system, on the spray gun.

It is a further object of the invention to provide a mounting bracket that employs a resilient, compressible member capable of frictionally engaging the spray gun to provide a secure attachment of the bracket and device to the spray gun.

It is still a further object of the invention to provide a mounting bracket that allows the device secured to the bracket to be adjusted with respect to the bracket in order to properly position the device with respect to the nozzle of the spray gun.

It is still another object of the invention to provide a mounting bracket that has a simple and inexpensive construction and is easy to assemble and use.

The present invention is a mounting bracket used to support a device, e.g., a laser targeting and feedback system, on a spray gun that can be secured to spray guns of various configurations that include an upstanding hook used to hang the spray gun in a storage location when not in use. The bracket comprises a bolt having at least one collar disposed at one end and a compressible member disposed on the bolt between the collar and a head on the bolt. The bolt is adjustably and threadably attached to the collar such that the threaded collar may move along the threaded end of the bolt to compress the member between the bolt head and the collar and engage the spray gun.

Opposite the compressible member, the threaded collar is also attached to a support arm having a first leg attached to the collar and a second leg extending generally perpendicularly from the first leg. The first leg of the support arm is adjustably attached to the threaded collar and the device is adjustably attached to the second leg. This allows the position of the first leg of the support arm to be adjusted relative to the threaded collar and the position of the device to be adjusted relative to the second leg of the support arm to precisely position the device relative to the spray gun.

Various other features, objects and advantages of the invention will be made apparent from the following detailed description taken together with the drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

The drawings illustrate the best mode presently contemplated of carrying out the invention.

In the drawings,

FIG. **1** is an isometric view of a paint spray gun to which a laser targeting and feedback system has been attached utilizing the mounting bracket of the present invention;

FIG. **2** is a cross-sectional view illustrating the mounting bracket and laser system positioned within but not engaged with an upstanding hook on the paint spray gun;

FIG. **3** is a cross-sectional view along line **3**—**3** of FIG. **2**;

FIG. **4** is a cross-sectional view along line **4**—**4** of FIG. **1**;

FIG. **5** is a cross-sectional view along **5**—**5** of FIG. **4**;

FIG. **6** is an isometric view of a paint spray gun having a different configuration to which a laser targeting and feedback system has been attached utilizing the mounting bracket of FIG. **1**;

FIG. **7** is an isometric view of a second embodiment of the mounting bracket of the present invention secured to a paint spray gun; and

FIG. **8** is a cross-sectional view along line **8**—**8** of FIG. **7**.

DETAILED DESCRIPTION OF THE DRAWINGS

With reference now to the drawing figures in which like reference numerals designate like parts throughout the disclosure, a paint spray gun indicated generally at **10** is illustrated in FIG. **1**. The spray gun **10** includes a handle **12**, a body portion **14** extending from the upper end of the handle **12** and a nozzle **16** extending from the body portion **14** opposite the handle **12**. A paint container **18** is secured to the body portion **14** and provides a supply of paint to the spray gun **10**. A control knob **20** is located at the rear of the body portion **14** spaced from the paint container **18** to control the flow of paint from the container **18** into the spray gun **10**. Below the knob **20**, the handle **12** also includes a valve control switch **22** at the rear of the handle that controls the flow of compressed air through a hose **24** connected to the bottom of the handle **12**. Once the paint flow and air flow are properly adjusted by using the knob **20** and the switch **22**, a person can activate the gun **10** and discharge the paint and compressed air by squeezing a downwardly-extending trigger **26** pivotally attached to the body portion **14** and spaced from the handle **12**.

As best shown in FIGS. **2**–**5**, the spray gun **10** also includes an upstanding hook **28** extending upwardly from the body portion **14** opposite the handle **12**. The hook **28** includes a base **30** attached to the upper surface of the body portion **14** and a forwardly curving portion **32** extending outwardly from the base **30** and forwardly towards the nozzle **16**. The base **30** and the curving portion **32** have a continuous inner face **33** and cooperate to define a generally circular recess **34** within the hook **28** that receives a peg (not shown) or other support on which the spray gun **10** can be hung when not in use.

A mounting bracket, indicated generally at **36**, is adapted to securely engage the inner face **33** of the hook **28** and support a device **38** on the spray gun **10**. The device **38** can be any of a number of attachments for the spray gun **10**, including a laser targeting and feedback system of conventional construction and operation, and illustratively may be system as manufactured by Laser Touch and Technologies, LLC of Cedar Falls, Iowa under its part number LT-B512, LP112353, although it is understood that other suitable targeting and feedback systems can be used.

The bracket **36** includes a threaded bolt **40**, having a head **40***a* and a threaded end **40***b* opposite the head **40***a*, that supports a washer **41** adjacent the head **40***a*, a first collar **42** adjacent the washer **41**, a pair of compressible members **44** adjacent the first collar **42**, and a second collar **46** adjacent the compressible members **44** and opposite the first collar **42**. The first collar **42** and compressible members **44** each include a generally smooth central axial opening **48**, **52**, respectively, that are alignable to slidably receive the bolt **40**. The central openings **48**, **52** are also alignable with a threaded axial opening **50** extending through the center of the second collar **46** that receives and engages the threaded end **40***b* of the bolt **40**.

The compressible members **44** are formed of a resilient deformable material, such as a rubber, (other suitable materials), and include an inner reduced diameter portion **44***a* and having an outer enlarged diameter portion **44***b* at one end. Each outer portion **44***b* is preferably integrally formed with the inner portion **44***a* and abuts the adjacent first collar **42** or second collar **46**, with the inner portions **44***a* of each member **44** abutting one another. Alternatively, the inner portions **44***a* may be integrally formed to form a single compressible member **44** having a single inner portion **44***a* and a pair of outer portions **44***b* at each end abutting the respective collars. As a further alternative, the compressible member could be comprised of two reduced diameter portions and two separate enlarged diameter portions.

Opposite the compressible members **44**, the second collar **46** is also attached to a support arm **54**. The support arm **54** is generally L-shaped and includes a first leg **56** engaged with the second collar **46** and a second leg **58** extending generally perpendicularly to the first leg **56** from a bend **60** located at one end of the first leg **56**.

The first leg **56** includes a longitudinal slot **62** that is adapted to receive a screw **64**. The screw **64** is inserted through the slot **62** and is threadably engaged with a bore **66** in the second collar **46** spaced from the threaded opening **50**. A washer **68** is disposed between the screw **64** and the first leg **56** such that when the screw **64** engages the bore **66**, the screw **64**, through the washer **68**, compresses the first leg **56** into frictional engagement with the second collar **46** opposite the compressible members **44**. When the screw **64** is partially disengaged from the bore **66**, the first leg **56** may slide along the longitudinal slot **62** with respect to the second collar **46**, allowing the first leg **56** and laser system **38** to be positioned anywhere along the slot **62** relative to the second collar **46**.

Alternatively, the longitudinal slot **62** may be replaced by a plurality of spaced holes (not shown) extending along the length of the first leg **56**. The bolt **40** extends through one of the holes on the first leg **56** and is secured therein by a washer (not shown) and a nut (not shown) secured to the bolts, opposite the compressible member **44**. By tightening the nut on the bolt **40**, the first leg **56** and second collar **46** can be drawn towards the first collar **42** to actually compress the compressible member into engagement with the hook **28**. In this embodiment, the second collar **46** may also be removed such that the first leg **56** of the support arm **54** directly contacts the outer portion **44***b* of the compressible member.

The second leg **58** of support arm **54** also includes a longitudinal slot **70** similar to slot **62** in first leg **56**. A threaded bolt **72** protruding from one side of the system **38** extends through the slot **70** in the second leg **58**. A wing nut **74** having a pair of finger grasping sections **76**, **78** is threadably engaged with the end of the threaded bolt **72** extending past the second leg **58** to secure the system to the second leg **58**. An individual may grasp the finger grasping sections **76**, **78** and manually rotate the wing nut **74**, engaging the wing nut **74** with the bolt **72** and compressing the wing nut **74** and bolt **72** against opposite sides of the second leg **58** of the support arm **54**. Similarly to the screw **64**, the wing nut **74** can also be partially disengaged from the bolt **72** to allow the wing nut **74**, bolt **72** and system **38** to be slid along the slot **70** in order to position the system **38** as desired.

To secure the bracket **36** to the gun **10**, initially the bracket **36** is positioned to place the compressible members **44** within the upstanding hook **28**. This is accomplished by placing the compressible members **44** in the position shown in FIG. **3** such that the inner portion **44***a* of each compressible member **44** is disposed within the recess **34** defined by the hook **28**, and each outer portion **44***b* is located to one side of the hook **28** as best shown in FIGS. **2** and **3**. The bolt **40** is then rotated with respect to the threaded opening **50** in the second collar **46** such that the engagement of the threaded end **40***b* of the bolt **40** and opening **50** draws the first collar **42** and second collar **46** toward one another. As the first collar **42** and second collar **46** move towards each other, the compressible members **44** are axially compressed such that the inner portions **44***a* expand radially outwardly to frictionally contact the inner surface **33** of the base **30** and forwardly curving portion **32**, and each outer portion **44***b* frictionally engages one side of the hook **28**, as shown in FIGS. **4** and **5**. The bolt **40** is rotated until the frictional engagement of the respective portions of the compressible member **44** rigidly secures the bracket **36** within the hook **28**. At this point, the position of the support arm **54** with respect to the second collar **46** can be adjusted by loosening the screw **64** and sliding the first leg **56** of the arm **54** along the slot **62**. The bracket **36** can also be secured to the second collar **46** in an inverted position to accommodate certain types of spray guns by removing the screw **64** from the second collar **46** and bracket **36**, rotating the bracket 180° such that the slot **62** is aligned with the opening **50**, and inserting the screw **64** through the slot **62** and into the opening **50**.

Once the bracket **36** is attached to the hook **28**, the laser system **38** can be secured to the bracket **36**. To do so, the first leg **56** of the support arm **54** is secured to the second collar **46** with the screw **64**. The system **38** is then secured to the second leg **58** of the support arm **54** by inserting the bolt **72** extending from the system **38** through the slot **70** in the second leg **58** and engaging the wing nut **74** with the bolt **72**. The position of the system **38** on the second leg **58** can be adjusted by loosening the wing nut **74** and sliding the bolt **72** and system **38** along the slot **70** in the second leg **58**.

To remove the bracket **36** from the hook **28**, the threaded end **40***b* of the bolt **40** is rotated to partially disengage the bolt **40** from within the threaded opening **50** such that the first collar **42** and the second collar **46** move away from one another. This enables the compressible members **44** to disengage from the hook **28** and return to their uncompressed state. The bracket **36** then may be removed from the hook **28** by displacing the compressible member **44** from within the recess **34** of the hook **28**.

The configuration and method of attachment of the bracket **36** enables the bracket **36** to securely attach a system **38** to any type of spray gun that includes in its overall configuration an upstanding hook **28** similar to that found on the spray gun **10** shown in FIG. **1**. For example, referring now to FIG. **6**, a spray gun **110** is illustrated that includes a handle **112**, a body portion **114** disposed at one end of the handle **112**, and a nozzle **116** extending from the body portion **114** opposite the handle **112**. A paint container **118** used to supply paint to the spray gun **110** is attached to and depends downwardly from the body portion **114**. The spray gun **110** also includes a trigger **126** attached to the body portion **114** and located adjacent the container **118** that is used to activate the spray gun **110**. Opposite the trigger **126**, an upstanding hook **128** having a shape similar to the hook **28** on the spray gun **10** in FIG. **1** is disposed. As shown in FIG. **6**, the bracket **36** can be positioned within the hook **128** in a manner identical to that described above and secured therein to securely position a system **38** on the spray gun **110**.

As shown in FIGS. **7** and **8**, a second embodiment of the present invention is disclosed. A mounting bracket **236** is shown attached to a gravity feed spray gun **210**. The bracket **236** is attached to a feed inlet **212** of the spray gun **210** that is generally cylindrical in shape.

The bracket **236** supports a laser system **238** on the spray gun **210** in a manner similar to the previous embodiment. A bracket **236** includes a bolt **240** having a head **240**A at one end and a threaded end **240**B spaced from the head **240**A. A strap **242** is positioned on the bolt **240** between the head **240**A and a collar **246** threadably disposed on the bolt **240** opposite the head **240**A. The strap **242** is formed of a semi-rigid, resilient material and includes a pair of circular openings **248** at opposite ends. Each opening **248** is positioned around the bolt **240** such that the strap **242** forms a generally U-shape and encloses a loop **249** between the bolt **240** and the strap **242**. The strap **242** also includes a cover **250** that extends along the strap **242** between the openings **248** to cover the side of the strap **242** facing the bolt **240**. The cover **250** is formed of a flexible counter resilient material, such as rubber and prevents the strap **242** from rubbing against and damaging the feed inlet **212** when the strap **242** is engaged with the inlet **212**.

The strap **242** is spaced from the threaded end **240**B of the bolt **240** and the collar **246** by a spacer **252** disposed on the bolt **240** and a pair of washers **254** located adjacent each end of the spacer **252**. The spacer **252** is formed of a substantially rigid material, such as a metal or hard plastic, and has a generally cylindrical shape that defines a central, axial passage **253** therein. The strap **242** is retained on the bolt **240** by the insertion of the bolt **240** through the openings **248** and by the engagement of the strap **242** with the spacer **252** at one end and a rigid fixed washer **256** disposed adjacent the head **240**A at the opposite end.

The collar **246** is formed similarly to the collars of the previous embodiment and includes a central opening **258** that engages the threaded end **240**B of the bolt **240**. The collar **246** also includes a threaded bore (not shown) radially spaced from the central opening **258**. The position of the collar **248** on the threaded end **240**B of the bolt **240** can be adjusted to move the spacer **252** along the bolt **240** and compress the strap **242** against the feed inlet **212** to removably secure the strap **242** and bracket **238** to the spray gun **210**.

The bracket **236** also includes a support arm **262** having a first portion **264** and a second portion **266** joined by a bend **268**. The first portion **264** includes a longitudinal slot **270** that is adapted to receive a screw **272** inserted through the slot **270** and a washer **274** positioned over the slot **270**, the screw **272** releasably engageable within the threaded bore on the collar **246**. The engagement of the screw **272** within the threaded bore enables the support arm **262** to be supported by the collar **246** and bolt **240**. Furthermore, similar to the previous embodiment, the screw **272** may be loosened to enable the first portion **264** of the support arm **262** to slide with respect to the threaded bore and collar **246** to adjust the position of the support arm **262** relative to the collar **246** and bolt **240**.

The second portion **266** of the support arm **262** includes a second longitudinal slot **276**. The second slot **276** is adapted to receive a threaded bolt **280** protruding from the laser system **238** such that the bolt **280** can be inserted through the second slot **276** and engaged with a wing nut **282** opposite the system **238** to releasably and adjustably secure the laser system **238** to the support arm **262**.

Various alternatives and embodiments are contemplated as being within the scope of the following claims particu-

larly pointing out and distinctly claiming the subject matter regarded as the invention.

I claim:

1. A support for adjustably securing a device to a spray gun, the gun including a body portion supporting an upstanding hook defining an interior recess, a feed inlet tube and a nozzle extending from the body portion, the support comprising:

a first substantially rigid collar;

a second substantially rigid collar;

a bolt interconnecting the first rigid collar and the second rigid collar and adapted to draw said collars together along the bolt axis;

at least one compressible member disposed on the bolt between the first and second collars, said compressible member adapted to engage a portion of the spray gun in response to said collars being drawn together;

an adjustable bracket secured to the second collar opposite the compressible member adapted to support the device on the bracket apart from the spray gun;

a third substantially rigid collar disposed on the bolt against the first collar between the first collar and the compressible member; and

wherein the bolt is threadedly engaged with the second collar.

2. The support of claim **1** wherein the compressible member includes an inner, reduced diameter portion and a pair of outer enlarged diameter portions at either end of the inner portion that abut the first and second collars, respectively.

3. The support of claim **2** wherein the compressible member has a central, axial opening adapted to receive the bolt.

4. The support of claim **3** wherein the compressible member is formed of a resilient material.

5. The support of claim **4** wherein the compressible member is formed of a rubber.

6. The support of claim **1** wherein the compressible member is formed of a pair of compressible sections, each section including a inner portion and an outer portion at one end of the inner portion, the respective inner portions abutting one another and the outer portions abutting the first and second collars.

7. The support of claim **1** wherein the second collar further includes a threaded bore spaced from and parallel to the axis of the bolt that receives a threaded member inserted through a slot in the bracket.

8. The support of claim **1** wherein the first collar is a washer.

9. The support of claim **1** further comprising a substantially rigid spacer slidably disposed on the bolt between the compressible member and the second collar.

10. A mounting bracket for releasably attaching a device to a spray gun, the spray gun including an upstanding hook defining an interior recess and a feed inlet tube on a body portion of the spray gun, the bracket comprising;

a bolt;

a first collar secured to one end of the bolt;

a second collar secured to the bolt opposite the first collar adapted to be drawn by the bolt towards the first collar;

at least one compressible member disposed on the bolt between the first collar and the second collar, said compressible member engageable with the body of the spray gun in response to drawing the first and second collars together;

a support arm secured to the second collar opposite the compressible member, the arm including an opening adapted for the attachment of the device to the support arm;

a third collar attached to the bolt against the first collar between the first collar and the compressible member; and

wherein the support arm includes a first leg secured to and selectively rotatable with respect to the second collar and a second leg extending generally perpendicularly from the first leg; and

wherein the first leg of the arm includes a longitudinal slot alignable with a bore in the second collar, and the bore is disposed adjacent the periphery of the second collar and is adapted to receive a threaded member inserted through the slot.

11. The bracket of claim **10** wherein the opening is disposed in the second leg.

12. The bracket of claim **11** wherein the opening is a longitudinally extending aperture.

13. The bracket of claim **12** wherein the aperture is adapted to adjustably secure the device to the bracket.

14. A support for adjustably securing a device to a spray gun, the gun including a body portion supporting an upstanding hook defining an interior recess, a feed inlet tube and a nozzle extending from the body portion, the support comprising:

a first substantially rigid collar;

a second substantially rigid collar;

a bolt interconnecting the first rigid collar and the second rigid collar and adapted to draw said collars together along the bolt axis;

at least one compressible member disposed on the bolt between the first and second collars, said compressible member adapted to engage a portion of the spray gun in response to said collars being drawn together;

an adjustable bracket secured to the second collar opposite the compressible member adapted to support the device on the bracket apart from the spray gun; and

wherein the compressible member is an elongate strap attached to the bolt at opposite ends of the strap.

15. The support of claim **14** wherein the strap is formed of a strip of flexible material.

16. The support of claim **14** wherein the strap includes a sheath extending between each end of the strap.

17. A support for adjustably securing a device to a spray gun, the gun including a body portion supporting an upstanding hook defining an interior recess, a feed inlet tube and a nozzle extending from the body portion, the support comprising:

a first substantially rigid collar;

a second substantially rigid collar;

a bolt interconnecting the first rigid collar and the second rigid collar and adapted to draw said collars together along the bolt axis;

at least one compressible member disposed on the bolt between the first and second collars, said compressible member adapted to engage a portion of the spray gun in response to said collars being drawn together;

an adjustable bracket secured to the second collar opposite the compressible member adapted to support the device on the bracket apart from the spray gun; and

wherein the bolt is threadably engaged with the second collar; and

wherein the second collar further includes a threaded bore spaced from and parallel to the axis of the bolt that

receives a threaded member inserted through a slot in the bracket.

18. A mounting bracket for releasably attaching a device to a spray gun, the spray gun including an upstanding hook defining an interior recess and a feed inlet tube on a body portion of the spray gun, the bracket comprising;

a bolt;

a first collar secured to one end of the bolt;

a second collar secured to the bolt opposite the first collar adapted to be drawn by the bolt towards the first collar;

at least one compressible member disposed on the bolt between the first collar and the second collar, said compressible member engageable with the body of the spray gun in response to drawing the first and second collars together;

a support arm secured to the second collar opposite the compressible member, the arm including an opening adapted for the attachment of the device to the support arm; and

the support arm includes a first leg secured to and selectively rotatable with respect to the second collar, and a second leg extending generally perpendicularly from the first leg; and

the first leg of the arm includes a longitudinal slot alignable with a bore in the second collar, and the bore is disposed adjacent the periphery of the second collar and is adapted to receive a threaded member inserted through the slot.

* * * * *