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PRODUCTION & ASSEMBLY

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PRODUCT CATALOG

WHY MAKITA® CORDLESS?

INNOVATIVE CORDLESS TECHNOLOGY

Makita designs and manufactures innovative cordless tools utilizing the latest advanced technology that allows professionals the ability to use cordless tools on tasks previously thought to be impossible. Our goal in designing manufacturing & assembly cordless tools is to break away from the historical method of costly air hose operation and allow the operator freedom with a powerful, accurate and ergonomic solution.

Makita's launch of the Torque-Tracer wireless data communication tools add additional value within the manufacturing environment by providing features with improved Quality Assurance methods. Torque-Tracer's ability to capture fastening characteristics adds a traceability and communication component to quality management with subsequent gains in productivity.

REDUCED ENERGY COSTS

Less Energy Consumption needed to power cordless tools than to power pneumatic tooling. Extreme Energy Savings by eliminating air line and air tool leakage. Higher Quality Control by reducing damage to manufactured products often caused by hoses and cords. Reduced Operating Costs and down time by eliminating oilers and oil maintenance. Reduced Maintenance Costs by minimizing down time to repair damaged products.

MORE FREEDOM

More Flexibility to roam from one workspace to the next Greater Access and Maneuverability in confined workspaces and inside closed compartments Increased Efficiency with the ability to interchange tools from one application to the next Easier to Reposition Fastening System when assembly lines need to be rerouted, expanded or eliminated Quicker Recoveries from power interruptions

SAFER WORKPLACE

Reduced Hazards caused by air hoses laying across floors or hanging from ceiling Lighter Weight with Ergonomic Design for operator control Lower Vibration and Noise for operator comfort Environmentally Friendly low toxicity battery platforms

BRUSHLESS MOTOR

UP TO 50% LONGER MOTOR LIFE

The Makita-built brushless motor eliminates carbon brushes, enabling the motor to run cooler and more efficiently for longer life. The electronically-controlled brushless motor efficiently uses energy to match torque and RPM to the changing demands of the application.



LOW-REACTION TECHNOLOGY

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BENEFITS

Dramatically reduces repetitive motion stress experience when operating clutch-based tools within assembly facilities. Reduces cumulative wrist strain, operator fatigue, lowers the instance of injury caused by repetitive fastening tasks, and can reduce company healthcare costs related to repetitive motion stress.

TECHNOLOGY

Clutch components utilizing proprietary, patented technology significantly reduces the "kickback" experienced once final torque is applied by clutch tooling Available as a retrofit to existing BFT, BFL*, and DFT** Series Makita clutch tools, or included as OEM component on new tools.

*Available for BFL300FZ, 301RZ, 400FZ, and 402RZ models. **Available for DFT085FMZ and 127FMZ models



PRODUCTION & ASSEMBLY PRODUCT CATALOG

BRUSHLESS PROGRAMMABLE SCREWDRIVERS PAGE 4

> ASSEMBLY PISTOL SCREWDRIVERS PAGE 6

BRUSHLESS PRECISE CONTROL RIGHT ANGLE NUTRUNNERS PAGE 8

> TORQUE TRACER PAGE 10

PROGRAMMABLE SHUT-OFF IMPACTS PAGE 12

> HAZLOC[®] SCREWDRIVERS PAGE 14

> > ACCESSORIES PAGE 15

BRUSHLESS PROGRAMMABLE SCREWDRIVERS

PRECISE TORQUE CONTROL SCREWDRIVERS

Lightweight and Ergonomic Only 6-3/4" in length and weighs only

2.4 lbs. with battery (DFT023FMZ and DFT045FMZ models)

Built-In L.E.D. Light

Illuminates work surface for better visibility in low light environments

Brushless Motor

Makita-built motor technology provides higher speeds and advanced monitoring

Lithium-Ion Battery

For extended run time and total lifetime charge cycles

Audible Signal For incomplete

or bad fastening

DFT045FMZ

14.4V Lithium-Ion Brushless Cordless 1/4" Hex Screwdriver (Battery not included)



Color-Coded Identification Plate With unique I.D. number

Large Pass/Fail L.E.D.

Indicates sufficient and insufficient fastening achievement and audibly alerts operator to failed fastenings

6-Phase Rundown Programming

RPM and Directional programing via USB port for multi-stage rundown control. Provides better quality fastening and assists in cross-thread detection.

MAINTENANCE MODE

- Included software has the ability to pre-program a maintenance cycle
- Tool notifies operator at maintenance interval for calibration and/or preventative maintenance needed

SMART SYSTEM

- Auto Battery Shutoff

 Shuts off the tool when battery
- capacity is less than 5%
- · Ensures consistent fastening torque



PASS/FAIL L.E.D. LAMP Large Pass/fail lamp indicates sufficient and insufficient fastening achievement and audibly alerts operator to failed fastenings.



RPM & DIRECTIONAL PROGRAMMING RPM and Directional programing via USB for multi-stage rundowns.

PRECISE TORQUE CONTROL SCREWDRIVERS



*FMAZ suffix indicates Low-Reaction model.



LITHIUM-ION BATTERY Precision sensor informs operator of insufficient battery charge level through visual and audible indicators.



BRUSHLESS MOTOR Makita-Built motor technologies provide higher speeds and advanced monitoring.



BUILT-IN L.E.D. LIGHT Built-in L.E.D. light illuminates work surface for better visibility in low light environments.



TORQUE ACCURACY "Real World" accuracy has earned certification within major Automotive and Aerospace Assemblers achieving repeatability within 4% of mean torque.

ASSEMBLY PISTOL SCREWDRIVERS

PRECISE CONTROL SCREWDRIVERS



 Reduces deviation from pre-set fastening torque caused by unintentional over-tightening environment





+/- 10% with Cm ≥ 1.67

REPETITIVE ACCURACY

Torque Accuracy • Long-life clutch provides consistent operation within +/-10% of mean torque with real-world repeatability consistencies within +/-4%.



SMART SYSTEM

Auto Battery Shutoff • Shuts off the tool when battery capacity

is less than 5%.Ensures consistent fastening torque.

Indication Lamp and Audible Alert

 Precision sensor indicates fastening sufficiency and battery power conditions with light and/or audible alert.

PRECISE TORQUE CONTROL SCREWDRIVERS







	BFT022FZ	BFT044FZ	BFT083FZ
Voltage	14.4V	14.4V	14.4V
Capacities	1/4" Hex Shank	1/4" Hex Shank	1/4" Hex Shank
Fastening Torque	0.5-2.0 Nm (4-18 in. lbs.)	1-4 Nm (9-35 in. lbs.)	3-8 Nm (27-71 in. lbs.)
No Load Speed (RPM)	700	950	80
Length	7-7/8"	7-7/8"	7-7/8"
Height (w/Battery)	10-1/4"	10-1/4"	10-1/4"
Width	2-9/16"	2-9/16"	2-13/16"
Weight (w/Battery)	3.3 lbs	3.3 lbs	3.3 lbs
Battery	BL1430B, BL1415NA	BL1430B, BL1415NA	BL1430B, BL1415NA





	BFT084FZ / BFT084FAZ*	BFT126FZ / BFT126FAZ*
Voltage	14.4V	14.4V
Capacities	1/4" Hex Shank	1/4" Hex Shank
Fastening Torque	3-8 Nm (27-71 in. lbs.)	5-12 Nm (44-106 in. lbs.)
No Load Speed (RPM)	780	410
Length	7-7/8"	7-7/8"
Height (w/Battery)	10-1/2"	10-1/4"
Width	2-9/16"	2-9/16"
Weight (w/Battery)	3.3 lbs	3.3 lbs
Battery	BL1430B, BL1415NA	BL1430B, BL1415NA

*FAZ suffix indicates Low-Reaction model.



ADVANCED TECHNOLOGY

- Two-Piece D-28 Motor Replaceable armature allows greater
- serviceability. Dual sealed ball bearings for less friction and greater efficiency.
 High performance fan reduces temperatures
- and increases tool life.
 High-grade magnet generates maximum performance.



LOW OWNERSHIP COST

Designed for High Endurance Applications

Nut and bolt housing assembly ensures

- long term housing integrity.
- Replaceable brushes easily accessed without the need to open the tool housing.
- Solder-less internal components for easy and fast replacement.

BRUSHLESS PRECISE CONTROL RIGHT ANGLE NUT-RUNNERS

BUILT-IN ELECTRONIC SYSTEM



	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS	BRUSHLESS
	DFL083FZ	DFL083F5Z	DFL125FZ	DFL125F5Z	DFL204FZ
Voltage	14.4V	14.4V	14.4V	14.4V	14.4V
Capacities	3/8" Square Drive	1/4" Square Drive	3/8" Square Drive	1/4" Square Drive	3/8" Square Drive
Fastening Torque	2-8 Nm (18-71 in. lbs.)	2-8 Nm (18-71 in. lbs.)	5-12 Nm (44-106 in. lbs.)	5-12 Nm (44-106 in. lbs.)	8-20 Nm (71-177 in. lbs.)
No Load Speed (RPM)	150 - 700	150 - 700	100 - 700	100 - 700	100 - 440
Length (w/Battery)	22	22	22	22	22
Height (w/Battery)	3-5/32"	3-5/32"	3-5/32"	3-5/32"	3-5/32"
Width	4-11/64"	4-11/64"	4-11/64"	4-11/64"	4-11/64"
Weight (w/Battery)	4.7 lbs.	4.7 lbs.	4.7 lbs.	4.7 lbs.	4.7 lbs.
Battery	BL1430B/BL1460A	BL1430B/BL1460A	BL1430B/BL1460A	BL1430B/BL1460A	BL1430B/BL1460A



RPM & DIRECTIONAL PROGRAMMING

RPM and directional programming via USB port for multi-stage rundown control



PASS/FAIL INDICATOR LAMP

· Indicates sufficient and insufficient fastening achievement and audibly alerts operator to failed fastenings.



BRUSHLESS PRECISE CONTROL RIGHT ANGLE NUT-RUNNERS

TORQUE-SPECIFIC TO INSTALL FASTENERS ACCURATELY

"Real World" accuracy has earned certification within major automotive and aerospace assemblers achieving repeatability within 4% of mean torque



	DFL302FZ/DFL302FAZ*†	DFL403FZ / DFL403FAZ*†	DFL651FZ [†] / DFL651FAZ ^{*†}
Voltage	14.4V	14.4V	18V LXT®
Capacities	3/8" Square Drive	3/8" Square Drive	3/8" Square Drive
Fastening Torque	16-30 Nm (142-266 in. lbs.)	25-40 Nm (221-354 in. lbs.)	25-65 Nm (221-575 in. lbs.)
No Load Speed (RPM)	70 - 230	50 - 220	80-200
Length (w/Battery)	22	22	23"
Height (w/Battery)	3-5/32"	3-5/32"	4-9/16"
Width (w/Battery)	4-11/64"	4-11/64"	2-15/16"
Weight (w/Battery)	5.1 lbs.	5.1 lbs.	6 lbs
Battery	BL1430B/BL1460A	BL1430B/BL1460A	BL1830B, BL1840B, BL1850B

*FAZ suffix indicates Low-Reaction model. †Programmability via USB port.



BALANCING/TETHERING

• Conveniently placed threaded holes on the top and side of tool allow for easy balancing or tethering in your workstation application.



BUILT-IN L.E.D. LIGHT

 Built-in L.E.D. light illuminates work surface for better visibility in low light environments.

TORQUE TRACER

SMART TOOLS PROVIDING QUALITY ASSURANCES VIA WIRELESS COMMUNICATION

- · Identifies multiple fastening characteristics for each rundown
- · Flexible systems conform to a broad variety of environments
- · Maintains cordless freedom of operator benefits while improving quality assurance best practices
- · Provides an energy efficient alternative to pneumatic platforms involving verifiers/qualifiers
- Adds traceability measures in environments wanting cordless flexibility and safety
- An alternative to expensive DC electric tool platforms
- · Uses Bluetooth frequency spectrum and Adaptive Frequency Hopping to assure an interference-free environment





	Thakita
Built-in L.E.D. Lamps	
Makita-Built Brushless Motor	
Long-life Clutch for High Repeatability —	
Torque Set Window	
Slim-Line Anti-Slip Dimpled Grip	
L.E.D. Operator Signal and Audible Alarm	
Auto Battery Shutoff	
	EPAG (GEGOS)
FL201RZ 4.4V Lithium-Ion Cordless 18" Sq. Drive Torque Tracer Jole Nut Runner	Takita 14.47 3.0Ah

E 14 4V Lithium-Ion Cor 3/8" Sq. Drive Torque Tracer Angle Nut Runner (Battery not included)



14.4V LITHIUM-ION High productivity with reduced weight. Very low self-discharge rates.



BLUETOOTH® RECEIVER Bluetooth receiver provides communication with tool. 24v discreet I/O for PASS/FAIL/BATCH to communicate with PLC. Serial port for downloading fastening data and torque values to PC.



BRUSHLESS MOTOR Makita-Built motor technologies provide higher speeds and advanced monitoring.

TORQUE-TRACER WIRELESS COMMUNICATION TOOLS



*RAZ suffix indicates Low-Reaction model.



	BFL201RZ / BFL201RAZ*	BFL301RZ / BFL301RAZ*	BFL402RZ / BFL402RAZ*
Voltage	14.4V	14.4V	14.4V
Capacities	3/8" Sq. Drive	3/8" Sq. Drive	3/8" Sq. Drive
Fastening Torque	10-20 Nm (89-177 in. lbs.)	16-30 Nm (142-266 in. lbs.)	25-40 Nm (221-354 in. lbs.)
No Load Speed (RPM)	360	260	200
Length	16-7/8"	18-3/4"	18-3/4"
Height (w/Battery)	3-7/8"	3-7/8"	3-7/8"
Width	2-13/16"	2-13/16"	2-13/16"
Weight (w/Battery)	3.8 lbs	4.4 lbs	4.4 lbs.
Battery	BL1430B	BL1430B	BL1430B

*RAZ suffix indicates Low-Reaction model.

TOOL RECOGNITION RCV02 Bluetooth® Receiver (Optional) • Fastening torque values • Fastening angle values **Built-in Transmitter** akita • Rundown rotations • Tool ID recognition • Time/date snap OK-NOK parameter achievement Batch achievement

PROGRAMMING INTERACTIVITY

- Torque value tolerance range
- Angle value tolerance range
- Rundown rotation min/max settings
- Tool lock down mode
- Tool brake option
- Soft start adjustment
- Calibration ability
- Batch management (PLC-based)
- Log all data from tool recognition



RS-232C Serial Cable/Serial Required (Available at a local PC supply store)

Facility PC



PROGRAMMABLE SHUT-OFF IMPACTS

EXTRA-COMPACT DESIGN



PROGRAMMABLE SHUT-OFF IMPACT DRIVERS







	BTD044Z	BTD064Z	BTD104Z
Voltage	14.4V	14.4V	14.4V
Capacities	1/4" Hex Shank	1/4" Hex Shank	1/4" Hex Shank
Maximum Torque	35 Nm (26 ft. lbs.)	65 Nm (50 ft. lbs.)	95 Nm (70 ft. lbs.)
Rundown Programming	Yes	Yes	Yes
No Load Speed (RPM)	0 - 2,300	0 - 2,500	0 - 2,700
Impacts Per Minute (IPM)	0 - 3,500	0 - 3,500	0 - 3,500
Length	6-7/16"	6-7/16"	6-5/8"
Height (w/Battery)	9-5/16"	9-5/16"	9-7/8"
Width	2-5/8"	2-5/8"	2-15/16"
Weight (w/Battery)	2.4 lbs.	2.4 lbs.	2.4 lbs.
Battery	BL1415NA	BL1415NA	BL1415NA

PROGRAMMABLE SHUT-OFF IMPACT WRENCHES

	Trakle	
	BTW104Z	BTW151Z
Voltage	14.4V	14.4V
Capacities	3/8" Square Drive	1/2" Square Drive
Maximum Torque	95 Nm (70 ft. lbs.)	150 Nm (110 ft. lbs.)
Rundown Programming	Yes	Yes
No Load Speed (RPM)	0 - 2,700	0 - 2,300
Impacts Per Minute (IPM)	0 - 3,500	0 - 3,000
Length	5-11/16"	7-5/8"
Height (w/Battery)	9-7/8"	10"
Width	2-15/16"	3-1/16"
Weight (w/Battery)	2.4 lbs.	4.2 lbs.
Battery	BL1415NA	BL1430B



ADVANCED TECHNOLOGY

Vari-Torque System
• Pre-set the tool to stop at the programmed number of impacts, providing consistent torque when fastening.



PASS/FAIL INDICATOR LAMP

• Indicates sufficient and insufficient fastening achievement and audibly alerts operator to failed fastenings.



HAZLOC® SCREWDRIVERS



	BFH040FRAE	BFH040RAE	BFH090FRAE	BFH090RAE	BFH120FRAE
Voltage	12V	12V	12V	12V	12V
Capacities	1/4" Hex Shank	1/4" Hex Shank	1/4" Hex Shank	1/4" Hex Shank	1/4" Hex Shank
Max Fastening Torque (Nm)	0.8-4.5 Nm (7-40 in. lbs.)	0.8-4.5 Nm (7-40 in. lbs.)	3.4-9.0 Nm (30-80 in. lbs.)	3.4-9.0 Nm (30-80 in. lbs.)	5.0-12.0 Nm (44-106 in. lbs.)
No Load Speed (RPM)	400	400	400	400	400
L.E.D. Lamp	YES	NO	YES	NO	YES
L.E.D. Pass/Fail	YES	YES	YES	YES	YES
Audible Signal	YES	NO	YES	NO	YES
Length	7-15/32"	7-15/32"	7-15/32"	7-15/32"	7-15/32"
Height	10-15/32"	10-15/32"	10-15/32"	10-15/32"	10-15/32"
Width	2-13/16"	2-13/16"	2-13/16"	2-13/16"	2-13/16"
Weight	3.3 lbs	3.3 lbs	3.3 lbs	3.3 lbs	3.3 lbs
Battery	BH1220	BH1220	BH1220	BH1220	BH1220



REPETITIVE ACCURACY

Torque Accuracy • Long-life clutch provides consistent operation within +/-10% of mean torque with real-world repeatability consistencies within +/-4%.



SMART SYSTEM

Auto Battery Shutoff • Shuts off the tool when battery capacity

is less than 5%.Ensures consistent fastening torque.

Indication Lamp and Audible Alert

 Precision sensor indicates fastening sufficiency and battery power conditions with light and/or audible alert.



BATTERIES AND CHARGERS

	Model No.	Battery	Voltage	Cell Type	Amp Hours	Charge Time	Charger(s)
	BL1430B	BL1430B	14.4v	Lithium-Ion	3.0Ah	22 Minutes	DC18RC, DC18RD,
	BL1415NA	BL1415NA	14.4v	Lithium-Ion	1.5Ah	20 Minutes	DC18SF
	BL1820B	BL1820B	18v	LXT [®] Lithium-Ion	2.0Ah	25 Minutes	
	BL1830B	BL1830B	18v	LXT [®] Lithium-Ion	3.0Ah	30 Minutes	
	BL1840B	BL1840B	18v	LXT [®] Lithium-Ion	4.0Ah	40 Minutes	DC18RC, DC18RD, DC18SF
and the second	BL1850B	BL1850B	18v	LXT [®] Lithium-Ion	5.0Ah	45 Minutes	
	BL1860B	BL1860B	18v	LXT [®] Lithium-Ion	6.0Ah	55 Minutes	
	193931-1	BH1233C	MAKSTAR® 12v	Ni-MH	3.3Ah	60 Minutes	DC18RC, DC18RD
	193929-8	BH1220C	MAKSTAR® 12v	Ni-MH	2.0Ah	30 Minutes	Defone, Deford

	Model No.	Description	Voltage	Cell Type	Battery
	DC18RC	18V LXT® Lithium-Ion Rapid Optimum Charger	12V - 18V	Lithium-Ion & Ni-MH	BL1820B, BL1830B, BL1840B, BL1850B,BL1860B, BL1415NA, BL1430B, BH1220C, BH1233C
(A A A A A A A A A A A A A A A A A A A	DC18RD	18V LXT® Lithium-Ion Dual Port Rapid Optimum Charger	12V - 18V	Lithium-Ion & Ni-MH	BL1820B, BL1830B, BL1840B, BL1850B,BL1860B, BL1415NA, BL1430B, BH1220C, BH1233C
3333	DC18SF	18V LXT® Lithium-Ion 4-Port Charger	14.4V - 18V	Lithium-Ion	BL1820B, BL1830B, BL1840B, BL1850B,BL1860B, BL1415NA, BL1430B
	193681-8	Battery Refreshing Adaptor	9.6V - 12V	Ni-MH	BH1233C, BH1220C

PRODUCTION TOOLING ACCESSORIES

BFT & BFL STANDARD TOOL COVER

Part No.	Color	Applicable Models
		Pistol
450331-1	Clear	
418425-8	Red	BFT022FZ, BFT044FZ/041RZ,
418424-0	Blue	BFT084FZ/082RZ, BFT126FZ/124RZ
418423-2	Yellow	
	F	Right Angle
418066-0	Clear	
418065-2	Red	BFL082FZ, BFL122FZ,
418064-4	Blue	BFL202FZ/201RZ
418032-7	Yellow	

BFT LOW-REACTION TOOL COVER

Part No.	Color	Applicable Models
		Pistol
A-51281	Clear	
A-51275	Red	BFT084FAZ/082RAZ.
A-51269	Blue	BFT126FAZ/124RAZ
A-51253	Yellow	

BFL RIGHT ANGLE TWO-PIECE SETS (Set Requires both A & B)

Part No.	Color	Applicable Models
418745-0	Clear	
418744-2	Red	(A) BFL300FZ/FAZ, 301RZ/RAZ,
418743-4	Blue	BFL400FZ/FAZ, 402RZ/RAZ
418691-7	Yellow	
418748-4	Clear	
418747-6	Red	
418746-8	Blue	(B) BFL300FZ/FAZ, 301RZ/RAZ
418692-5	Yellow	
418751-5	Clear	
418750-7	Red	
418749-2	Blue	(B) BFL400FZ/FAZ, 402RZ/RAZ
418693-3	Yellow	

BTD SHUT-OFF IMPACT TOOL COVERS

Part No.	Color	Description
454420-4	Blue	
454421-2	Clear	Fits all Compact BTD impacts
454422-0	Red	

DFT STANDARD TOOL COVERS

Part No.	Color	Description
424984-2	Clear	
424985-0	Red	DFT023FMZ & DFT045FMZ
424986-8	Blue	DF1023FWIZ & DF1043FWIZ
424987-6	Yellow	
424969-8	Clear	
424968-0	Red	DFT085FMZ & DFT127FMZ
424967-2	Blue	
424966-4	Yellow	

DFT LOW REACTION TOOL COVERS

Part No.	Color	Description
424973-7	Clear	
424972-9	Red	DFT085FMAZ & DFT127FMAZ
424971-1	Blue	Low Reaction
424970-3	Yellow	

BL1430B & BL1415NA BATTERY COVER

Part No.	Color		Description
450599-9	Clear	В	L1430B Battery Cover
454407-6	Clear	BL	1415NA Battery Cover
TORQUE ADJUSTING KEY			
Part No.	Description		Applicable Models

All clutch tools

765025-8 Torque Adjusting Key



DF012DSE 7.2V Lithium-Ion Cordless 1/4" Hex Driver-Drill Kit with Auto-Stop Clutch Makita-built motor delivers 71 in.lbs. of Max Torque in a compact design



TD012DSE 7.2V Lithium-Ion Cordless 1/4" Hex Impact Driver Kit Makita-built motor delivers 195 in.lbs. of Max Torque in a compact design

ADVANCED ERGONOMICS

ONLY 6-3/8" IN LENGTH

ONLY 2.4 LBS. WITH BATTERY

DFT045FMZ 14.4V Lithium-Ion Cordless 1/4" Hex Screwdriver

6-STAGE PROGRAMMABLE PRECISION FASTENING

R. LIGHTER.

1:113:

makita

Makita AAA

- Spindle Direction by Time or Rotation
- Speed Management by Time or Rotation
- Finishing Strategy

ALSO FEATURES PREVENTATIVE MAINTENANCE SCHEDULING



999CAT3 MAK-0516 MA-6607-16 The MAKITA' TEAL COLOR is the trade dress of Makita' Corporation and is protected under common law and registered with the U.S. Patent and Trademark Office. The Makita' Black & White color combination is the trade dress of Makita' Comparition and is nortected under common law with the U.S. Patent and Trademark Office.