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Safety Precautions

The following safety precautions will increase the life of the Notebook PC. Follow all precautions and instructions. Except as described in this manual, refer all servicing to qualified personnel.

Disconnect the AC power and remove the battery pack(s) before cleaning. Wipe the Notebook PC using a clean cellulose sponge or chamois cloth dampened with a solution of nonabrasive detergent and a few drops of warm water and remove any extra moisture with a dry cloth.

DO NOT place on uneven or unstable work surfaces. Seek servicing if the casing has been damaged.

DO NOT expose to dirty or dusty environments. DO NOT operate during a gas leak.

DO NOT press or touch the display panel. Do not place together with small items that may scratch or enter the Notebook PC.

DO NOT leave the Notebook PC on your lap or any part of the body to prevent discomfort or injury from heat exposure.

Battery safety warning: DO NOT throw the battery in fire. DO NOT short circuit the contacts. DO NOT disassemble the battery.

DO NOT place or drop objects on top and do not shove any foreign objects into the Notebook PC.

DO NOT expose to strong magnetic or electrical fields.

DO NOT expose to or use near liquids, rain, or moisture. DO NOT use the modem during electrical storms.
SAFE TEMP: This Notebook PC should only be used in environments with ambient temperatures between 10°C (50°F) and 35°C (95°F)

INPUT RATING: Refer to the rating label on the bottom of the Notebook PC and be sure that your power adapter complies with the rating.

DO NOT carry or cover a Notebook PC that is powered ON with any materials that will reduce air circulation such as a carrying bag.

DO NOT use the Notebook PC in municipal waste. This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

DO NOT use strong solvents such as thinners, benzene, or other chemicals on or near the surface.

DO NOT use damaged power cords, accessories, or other peripherals. Incorrect installation of battery may cause explosion and damage the Notebook PC.

DO NOT carry or cover a Notebook PC that is powered ON with any materials that will reduce air circulation such as a carrying bag.

DO NOT use strong solvents such as thinners, benzene, or other chemicals on or near the surface.

DO NOT use damaged power cords, accessories, or other peripherals. Incorrect installation of battery may cause explosion and damage the Notebook PC.

DO NOT throw the Notebook PC in municipal waste. This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

DO NOT throw the battery in municipal waste. The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.
Preparing your Notebook PC
These are only quick instructions for using your Notebook PC.

Installing the Battery Pack

Connecting the Power Adapter
Opening the LCD display panel
1. Carefully lift up the display panel with your thumb.
2. Slowly tilt the display panel forward or backward to a comfortable viewing angle.

Turning on the Power
1. Push and release the power button located beneath the LCD display panel.
2. Use [Fn]+[F5] or [Fn]+[F6] to adjust the LCD brightness.
Using the Touchpad

A. Slide your finger across the touchpad to move the pointer. You can also hold the left button and slide your finger to drag the selected item.

B. Use the left and right buttons like a standard mouse.
A. Use two fingertips to slide up/down/left/right on the touchpad to scroll a window up/down/left/right.

B. Use three fingers to move horizontally on the touchpad to swipe pages. Swipe from left to the right to view the next page or right to the left to return to the previous pages.

C. Use three fingers to tap the touchpad. This action mimics the right-click function of a mouse.

Customize the touchpad’s behavior in Windows Control Panel > Mouse Properties > Elantech > Options....

To perform the multi-finger gesture inputs smoothly, keep the distance between your fingertips as wide as half a finger.
Knowing the Parts
Right Side

1. **Headphone Output Jack**
   The stereo headphone jack (1/8 inch) is used to connect the Notebook PC’s audio out signal to amplified speakers or headphones. Using this jack automatically disables the built-in speakers.

2. **SPDIF Output Jack**
   This jack provides connection to SPDIF (Sony/Philips Digital Interface) compliant devices for digital audio output. Use this feature to turn the Notebook PC into a hi-fi home entertainment system.

3. **Microphone Input Jack**
   The mono microphone jack (1/8 inch) can be used to connect an external microphone or output signals from audio devices. Using this jack automatically disables the built-in microphone. Use this feature for video conferencing, voice narrations, or simple audio recordings.

Notebook PC User Manual 9
The notebook supports dual headphone output when you plug headphones to any two of the headphone output jack, SPDIF output jack, and microphone input jack.

The headphone output jack, SPDIF output jack, and microphone input jack support analog 5.1 Channel audio output when connected to external 5.1 channel speakers.

USB Port (2.0/1.1)

The USB (Universal Serial Bus) port is compatible with USB 2.0 or USB 1.1 devices such as keyboards, pointing devices, cameras, hard disk drives, printers, and scanners connected in a series up to 12Mbits/sec (USB 1.1) and 480Mbits/sec (USB 2.0). USB allows many devices to run simultaneously on a single computer, with some peripherals acting as additional plug-in sites or hubs. USB supports hot-swapping of devices so that most peripherals can be connected or disconnected without restarting the computer.

Antenna Input (on selected models)

The antenna input is for TV signal and allows for use with the provided digital TV with the antenna or input from subscription television services. The provided antenna can receive digital TV. Cable service connection can receive digital TV, analog TV, depending on paid services.

Use the provided adapter for use with coaxial connectors.

Optical Drive

The Notebook PC comes in various models with different optical drives. The Notebook PC’s optical drive may support compact discs (CD) and/or digital video discs (DVD) and may have recordable (R) or re-writable (RW) capabilities. See the marketing specifications for details on each model.
**Power Indicator**

The power indicator lights when the Notebook PC is turned ON and blinks slowly when the Notebook PC is in the Suspend-to-RAM (Sleep) mode. This indicator is OFF when the Notebook PC is turned OFF or in the Suspend-to-Disk (Hibernation) mode.

**Left Side**

**1 Kensington® Lock Ports**

The Kensington® lock ports allow the Notebook PC to be secured using Kensington® compatible Notebook PC security products. These security products usually include a metal cable and lock that prevent the Notebook PC to be removed from a fixed object. Some may also include a motion detector to sound an alarm when moved.

**2 Power Indicator**

**3 Air Vents**

The air vents allow cool air to enter and warm air to exit the Notebook PC.

Ensure that paper, books, clothing, cables, or other objects do not block any of the air vents or else overheating may occur.
4 **Power (DC) Input**

The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the Notebook PC and charges the internal battery pack. To prevent damage to the Notebook PC and battery pack, always use the supplied power adapter.

The adapter may become warm to hot when in use. Be sure not to cover the adapter and keep it away from your body.

5 **Display (Monitor) Output**

The 15-pin D-sub monitor port supports a standard VGA-compatible device such as a monitor or projector to allow viewing on a larger external display.

6 **LAN Port**

The RJ-45 LAN port with eight pins is larger than the RJ-11 modem port and supports a standard Ethernet cable for connection to a local network. The built-in connector allows convenient use without additional adapters.

7 **E-SATA Port**

External SATA or eSATA allows external connection of Serial-ATA devices originally designed for use inside the computer. It is up to six times faster than existing USB 2.0, & 1394 for external storage solutions and is also hot pluggable using shielded cables and connectors up to two meters.

8 **ExpressCard Slot**

One 26pin Express card slot is available to support one ExpressCard/34mm expansion card. This new interface is faster by using a serial bus supporting USB 2.0 and PCI Express instead of the slower parallel bus used in the PC card slot. (Not compatible with previous PCMCIA cards.)

9 **USB Port (2.0/1.1)**
**HDMI Port**

HDMI (High-Definition Multimedia Interface) is an uncompressed all-digital audio/video interface between any audio/video source, such as a set-top box, DVD player, and A/V receiver and an audio and/or video monitor, such as a digital television (DTV). Supports standard, enhanced, or high-definition video, plus multi-channel digital audio on a single cable. It transmits all ATSC HDTV standards and supports 8-channel digital audio, with bandwidth to spare to accommodate future enhancements or requirements.

**USB Port (2.0/1.1)**

**Front Side**

1. **Wireless Switch**
   Enables or disables the built-in wireless LAN and Bluetooth (selected models). When enabled, the wireless status indicator will light. Windows software settings are necessary before use.

2. **Flash Memory Slot**
   Normally an external memory card reader must be purchased separately in order to use memory cards from devices such as digital cameras, MP3 players, mobile phones, and PDAs. This Notebook PC has a built-in high-speed memory card reader that can conveniently read from and write to many flash memory cards as mentioned later in this manual.
Rear Side

Battery Pack

The battery pack is automatically charged when connected to an AC power source and maintains power to the Notebook PC when AC power is not connected. This allows use when moving temporarily between locations. Battery time varies by usage and by the specifications for this Notebook PC. The battery pack cannot be disassembled and must be purchased as a single unit.
Recovering Your Notebook PC

Using Recovery Partition

The Recovery Partition quickly restores your Notebook PC’s software to its original working state. Before using the Recovery Partition, copy your data files (such as Outlook PST files) to a USB storage device or to a network drive and make note of any customized configuration settings (such as network settings).

About the Recovery Partition

The Recovery Partition is a reserved space on your hard disk drive used to restore the operating system, drivers, and utilities installed on your Notebook PC at the factory.

IMPORTANT! DO NOT delete the partition named RECOVERY. The Recovery Partition is created at the factory and cannot be restored if deleted. Take your Notebook PC to an authorized ASUS service center if you have problems with the recovery process.

Using the Recovery Partition:

1. Press [F9] during bootup
2. Press [Enter] to select Windows Setup [EMS Enabled]
3. Read the ASUS Preload Wizard screen and click Next.
4. Select a partition option and click Next. Partition options:

   **Recover Windows to first partition only.**

   This option deletes only the first partition and allows you to keep other partitions, and to create a new system partition as drive “C”.

   **Recover Windows to entire HD.**

   This option deletes all partitions from your hard disk drive and creates a new system partition as drive “C”.
Recover Windows to entire HD with 2 partition.

This option deletes all partitions from your hard drive and creates two new partitions “C” (60%) and “D” (40%).

5. Follow the onscreen instructions to complete the recovery process.

Visit the ASUS website at www.asus.com for updated drivers and utilities.

Using Recovery DVD (on selected models)

Creating the Recovery DVD:
1. Double-click the **AI Recovery Burner** icon on the Window desktop.

2. Insert a blank writable DVD into the optical drive and click **Start** to start creating the Recovery DVD.

3. Follow the onscreen instructions to complete creating the recovery DVD.

Prepare three blank writable DVDs to create the Recovery DVD.

IMPORTANT! Remove the optional secondary hard disk drive before performing system recovery on your Notebook PC. According to Microsoft, you may lose important data because of setting up Windows on the wrong disk drive or formatting the incorrect drive partition. Refer to [http://support.microsoft.com/kb/937251/en-us](http://support.microsoft.com/kb/937251/en-us) for more details.
Using the Recovery DVD:

1. Insert the Recovery DVD into the optical drive. Your Notebook PC needs to be powered ON.

2. Restart the Notebook PC and press [Esc] on bootup and select the optical drive (may be labeled as “CD/DVD”) and press [Enter] to boot from the Recovery DVD.

3. Select a partition option and click **Next**. Partition options:

   **Recover Windows to first partition only.**
   This option deletes only the first partition and allows you to keep other partitions, and to create a new system partition as drive “C”.

   **Recover Windows to entire HD.**
   This option deletes all partitions from your hard disk drive and creates a new system partition as drive “C”.

   **Recover Windows to entire HD with 2 partition.**
   This option deletes all partitions from your hard drive and creates two new partitions “C” (60%) and “D” (40%).

4. Follow the onscreen instructions to complete the recovery process.

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**WARNING:** Do not remove the Recovery disc, unless instructed to do so, during the recovery process or else your partitions will be unusable.

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Visit the ASUS website at www.asus.com for updated drivers and utilities.
Declarations and Safety Statements

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

• This device may not cause harmful interference.
• This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

The use of a shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.
FCC Radio Frequency (RF) Exposure Caution Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment. “The manufacture declares that this device is limited to Channels 1 through 11 in the 2.4GHz frequency by specified firmware controlled in the USA.”

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Declaration of Conformity (R&TTE directive 1999/5/EC)

The following items were completed and are considered relevant and sufficient:

- Essential requirements as in [Article 3]
- Protection requirements for health and safety as in [Article 3.1a]
- Testing for electric safety according to [EN 60950]
- Protection requirements for electromagnetic compatibility in [Article 3.1b]
- Testing for electromagnetic compatibility in [EN 301 489-1] & [EN 301 489-17]
- Effective use of the radio spectrum as in [Article 3.2]
- Radio test suites according to [EN 300 328-2]
CE marking for devices with wireless LAN/ Bluetooth

IC Radiation Exposure Statement for Canada
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with IC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Operation is subject to the following two conditions:
• This device may not cause interference and
• This device must accept any interference, including interference that may cause undesired operation of the device.

To prevent radio interference to the licensed service (i.e. co-channel Mobile Satellite systems) this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.
Wireless Operation Channel for Different Domains

N. America  2.412-2.462 GHz  Ch01 through CH11
Japan      2.412-2.484 GHz  Ch01 through Ch14
Europe ETSI 2.412-2.472 GHz  Ch01 through Ch13

France Restricted Wireless Frequency Bands

Some areas of France have a restricted frequency band. The worst case maximum authorized power indoors are:

• 10mW for the entire 2.4 GHz band (2400 MHz–2483.5 MHz)
• 100mW for frequencies between 2446.5 MHz and 2483.5 MHz

Channels 10 through 13 inclusive operate in the band 2446.6 MHz to 2483.5 MHz.

There are few possibilities for outdoor use: On private property or on the private property of public persons, use is subject to a preliminary authorization procedure by the Ministry of Defense, with maximum authorized power of 100mW in the 2446.5–2483.5 MHz band. Use outdoors on public property is not permitted.

In the departments listed below, for the entire 2.4 GHz band:

• Maximum authorized power indoors is 100mW
• Maximum authorized power outdoors is 10mW

Departments in which the use of the 2400–2483.5 MHz band is permitted with an EIRP of less than 100mW indoors and less than 10mW outdoors:

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<td>08 Ardennes</td>
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<td>11 Aude</td>
<td>12 Aveyron</td>
<td>16 Charente</td>
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<td>24 Dordogne</td>
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<td>32 Gers</td>
<td>36 Indre</td>
<td>37 Indre et Loire</td>
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<td>41 Loir et Cher</td>
<td>45 Loiret</td>
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<td>55 Meuse</td>
<td>58 Nièvre</td>
<td>59 Nord</td>
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This requirement is likely to change over time, allowing you to use your wireless LAN card in more areas within France. Please check with ART for the latest information (www.art-telecom.fr)

Your WLAN Card transmits less than 100mW, but more than 10mW.
UL Safety Notices

Required for UL 1459 covering telecommunications (telephone) equipment intended to be electrically connected to a telecommunication network that has an operating voltage to ground that does not exceed 200V peak, 300V peak-to-peak, and 105V rms, and installed or used in accordance with the National Electrical Code (NFPA 70).

When using the Notebook PC modem, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- DO NOT use the Notebook PC near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- DO NOT use the Notebook PC during an electrical storm. There may be a remote risk of electric shock from lightning.
- DO NOT use the Notebook PC in the vicinity of a gas leak.

Required for UL 1642 covering primary (nonrechargeable) and secondary (rechargeable) lithium batteries for use as power sources in products. These batteries contain metallic lithium, or a lithium alloy, or a lithium ion, and may consist of a single electrochemical cell or two or more cells connected in series, parallel, or both, that convert chemical energy into electrical energy by an irreversible or reversible chemical reaction.

- Do not dispose the Notebook PC battery pack in a fire, as they may explode. Check with local codes for possible special disposal instructions to reduce the risk of injury to persons due to fire or explosion.
- Do not use power adapters or batteries from other devices to reduce the risk of injury to persons due to fire or explosion. Use only UL certified power adapters or batteries supplied by the manufacturer or authorized retailers.
Power Safety Requirement

Products with electrical current ratings up to 6A and weighing more than 3Kg must use approved power cords greater than or equal to: H05VV-F, 3G, 0.75mm² or H05VV-F, 2G, 0.75mm².

TV Tuner Notices

Note to CATV System Installer—Cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable – installation should include bonding the screen of the coaxial cable to the earth at the building entrance.

REACH

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at http://green.asus.com/english/REACH.htm.
Nordic Lithium Cautions (for lithium-ion batteries)

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer’s instructions. (English)

ATTENZIONE! Rischio di esplosione della batteria se sostituita in modo errato. Sostituire la batteria con un una di tipo uguale o equivalente consigliata dalla fabbrica. Non disperdere le batterie nell’ambiente. (Italian)

VORSICHT! Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers. (German)

ADVARSEL! Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren. (Danish)

WARNING! Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparat tillverkaren. Kassera använt batteri enligt fabrikantens instruktion. (Swedish)

VAROITUS! Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan sousittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti. (Finnish)

ATTENTION! Il y a danger d’explosion s’il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d’un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant. (French)

ADVAREL! Eksplsjionsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner. (Norwegian)

ВНИМАНИЕ! При замене аккумулятора на аккумулятор иного типа возможно его возгорание. Утилизируйте аккумулятор в соответствии с инструкциями производителя. (Russian)
This product is protected by one or more of the following U.S. Patents:

7,416,423; 7,415,588; 7,413,402; 7,411,791; 7,408,855; 7,403,378; 7,400,721; 7,399,011; 7,394,533; 7,392,968; 7,388,754; 7,388,752; 7,388,743; 7,382,605; 7,382,314; 7,375,952; 7,374,433; 7,373,493; 7,369,402; 7,369,064; 7,362,568; 7,362,521; 7,362,276; 7,361,034; 7,359,209; 7,359,189; 7,355,372; 7,353,408; 7,352,586; 7,343,645; 7,342,777; 7,342,193; 7,332,990; 7,328,354; 7,327,568; 7,325,241; 7,321,523; 7,319,585; 7,304,257; 7,299,479; 7,294,021; 7,294,011; 7,293,890; 7,293,273; 7,276,660; 7,267,566; 7,261,579; 7,261,573; 7,261,331; 7,259,342; 7,257,761; 7,245,488; 7,241,946; 7,234,971; 7,233,555; 7,229,000; 7,224,657; 7,223,021; 7,218,587; 7,218,096; 7,213,250; 7,203,856; 7,193,580; 7,189,937; 7,187,537; 7,185,297; 7,184,278; 7,164,089; 7,161,541; 7,149,911; 7,148,418; 7,137,837; 7,133,279; 7,130,994; 7,125,282; 7,120,018; 7,111,953; 7,103,765; 7,100,087; 7,091,735; 7,088,592; 7,088,119; 7,086,887; 7,085,130; 7,078,882; 7,068,636; 7,066,751; 7,061,773; 7,047,598; 7,047,541; 7,043,741; 7,039,415; 7,035,946; 7,002,804; 6,980,159; 6,969,266; 6,946,861; 6,938,264; 6,933,927; 6,922,382; 6,873,064; 6,870,513; 6,843,407; 6,842,150; 6,827,589; 6,819,564; 6,817,510; 6,788,944; 6,783,373; 6,782,451; 6,775,208; 6,768,224; 6,760,293; 6,742,693; 6,732,903; 6,728,529; 6,724,352; 6,717,802; 6,717,074; 6,711,016; 6,694,442; 6,693,865; 6,687,248; 6,671,241; 6,657,548; 6,639,806; 6,622,571; 6,618,813; 6,612,850; 6,600,708; 6,561,852; 6,515,663; 6,509,754; 6,500,024; 6,491,359; 6,456,580; 6,456,492; 6,449,224; 6,449,144; 6,430,060; 6,415,389; 6,412,036; 6,407,930; 6,396,419; 6,396,409; 6,377,033; 6,339,340; 6,330,996; 6,310,779; 6,305,596; 6,301,778; 6,253,284; 6,226,741; 6,147,467; 6,095,409; 6,094,367; 6,085,331; 6,041,346; 5,963,017;

U.S. Patent Design D563,594; D557,695; D545,803; D542,256; D538,276; D534,889; D518,041; D510,325; D510,324; D509,194; Patents Pending.