IMPORTANT SAFETY INSTRUCTIONS

Notice to Installers

The servicing instructions in this notice are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions, unless you are qualified to do so.

Note to System Installer

For this apparatus, the coaxial cable shield/screen shall be grounded as close as practical to the point of entry of the cable into the building. For products sold in the US and Canada, this reminder is provided to call the system installer's attention to Article 820-93 and Article 820-100 of the NEC (or Canadian Electrical Code Part 1), which provides guidelines for proper grounding of the coaxial cable shield.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

AVIS
RISQUE DE CHOC ÉLECTRIQUE
NE PAS OUVRIR

CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

WARNING
TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

This symbol is intended to alert you that uninsulated voltage within this product may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this product.

Ce symbole a pour but d'alerter toute personne qu'un contact avec une pièce interne de ce produit, sous tension et non isolée, pourrait être suffisant pour provoquer un choc électrique. Il est donc dangereux d'être en contact avec toute pièce interne de ce produit.

This symbol is intended to alert you of the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

Ce symbole a pour but de vous avertir qu'une documentation importante sur le fonctionnement et l'entretien accompagne ce produit.

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1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Power Source Warning

A label on this product indicates the correct power source for this product. Operate this product only from an electrical outlet with the voltage and frequency indicated on the product label. If you are uncertain of the type of power supply to your home or business, consult your service provider or your local power company.

The AC inlet on the unit must remain accessible and operable at all times.

Ground the Product

WARNING: Avoid electric shock and fire hazard! If this product connects to coaxial cable wiring, be sure the cable system is grounded (earthed). Grounding provides some protection against voltage surges and built-up static charges.
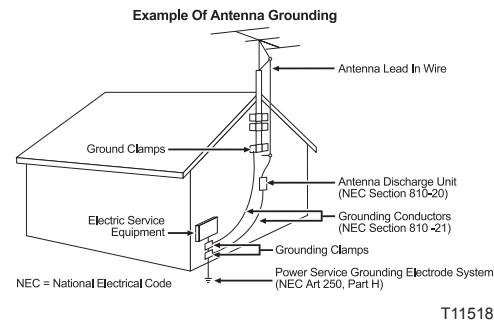
Outdoor Grounding System

If this product connects to an outdoor antenna or cable system, be sure the antenna or cable system is grounded (earthed). This provides some protection against voltage surges and built-up static charges.

Article 810 of the National Electric Code (NEC) ANSI/NFPA No. 70-1990, provides the following information:

- Grounding of the mast and supporting structure
- Grounding the lead-in wire to an antenna discharge unit
- Size of the grounding conductors
- Location of the antenna-discharge unit
- Connection to grounding electrodes
- Requirements for the grounding electrodes (see the following antenna grounding diagram as recommended by NEC ANSI/NFPA 70)

WARNING: Avoid electric shock and fire hazard! Do not locate an outside antenna system in the vicinity of overhead power lines or power circuits. Touching power lines or circuits might be fatal.

Example Of Antenna Grounding

Antenna Lead In Wire
Ground Clamps
Antenna Discharge Unit (NEC Section 810-20)
Grounding Conductors (NEC Section 810-21)
Electric Service Equipment
Grounding Clamps
Power Service Grounding Electrode System (NEC Art 250, Part H)
NEC = National Electrical Code

T11518

Protect the Product from Lightning

In addition to disconnecting the AC power from the wall outlet, disconnect the signal inputs.

Verify the Power Source from the On/Off Power Light

When the on/off power light is not illuminated, the apparatus may still be connected to the power source. The light may go out when the apparatus is turned off, regardless of whether it is still plugged into an AC power source.

Eliminate AC Mains Overloads

WARNING: Avoid electric shock and fire hazard! Do not overload AC mains, outlets, extension cords, or integral convenience receptacles. For products that require battery power or other power sources to operate them, refer to the operating instructions for those products.

Handling Disposable Batteries

This product may contain disposable batteries. Heed the following warning and follow the Safety and Disposal instructions below.

WARNING: There is danger of explosion if the battery is mishandled or incorrectly replaced. Replace only with the same type of battery. Do not disassemble it or attempt to recharge it outside the system. Do not crush, puncture, dispose of in fire, short the external contacts, or expose to water or other liquids. Dispose of the battery in accordance with local regulations and instructions from your service provider.

Safety

- Insert batteries correctly. There may be a risk of explosion if the batteries are incorrectly inserted.
- Do not attempt to recharge 'disposable' or 'non-reusable' batteries.
- Please follow instructions provided for charging 'rechargeable' batteries.
- Replace batteries with the same or equivalent type that we recommend.
- Do not expose batteries to excessive heat (such as sunlight or fire).
- Do not expose batteries to temperatures above 100°C (212°F).

Disposal

- The batteries may contain substances that could be harmful to the environment.
- Recycle or dispose of batteries in accordance with the battery manufacturer's instructions and local/national disposal and recycling regulations.

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- The batteries may contain perchlorate, a known hazardous substance, so special handling and disposal of this product might be necessary. For more information about perchlorate and best management practices for perchlorate-containing substance, see www.dtsc.ca.gov/hazardouswaste/perchlorate

Provide Ventilation and Select a Location

- Remove all packaging material before applying power to the product.
- Do not place this apparatus on a bed, sofa, rug, or similar surface.
- Do not place this apparatus on an unstable surface.
- Do not install this apparatus in an enclosure, such as a bookcase or rack, unless the installation provides proper ventilation.
- Do not place entertainment devices (such as VCRs or DVDs), lamps, books, vases with liquids, or other objects on top of this product.
- Do not block ventilation openings.

Protect from Exposure to Moisture and Foreign Objects

WARNING: Avoid electric shock and fire hazard! Do not expose this product to dripping or splashing liquids, rain, or moisture. Objects filled with liquids, such as vases, should not be placed on this apparatus.

WARNING: Avoid electric shock and fire hazard! Unplug this product before cleaning. Do not use a liquid cleaner or an aerosol cleaner. Do not use a magnetic/static cleaning device (dust remover) to clean this product.

WARNING: Avoid electric shock and fire hazard! Never push objects through the openings in this product. Foreign objects can cause electrical shorts that can result in electric shock or fire.

Service Warnings

WARNING: Avoid electric shock! Do not open the cover of this product. Opening or removing the cover may expose you to dangerous voltages. If you open the cover, your warranty will be void. This product contains no user-serviceable parts.

Check Product Safety

Upon completion of any service or repairs to this product, the service technician must perform safety checks to determine that this product is in proper operating condition.

Protect the Product When Moving It

Always disconnect the power source when moving the apparatus or connecting or disconnecting cables.

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United States FCC Compliance

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it 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 service provider or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Cisco Systems, Inc., could void the user's authority to operate the equipment.

The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. *The phone numbers listed are for FCC-related questions only and not intended for questions regarding the connection or operation for this device. Please contact your service provider for any questions you may have regarding the operation or installation of this device.*

Declaration of Conformity

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: 1) the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation.

Cisco Explorer 4642HDC and 4652HDC High-Definition Set-Tops with Multi-Stream CableCARD Interface

Models: 4642HDC and 4652HDC

Manufactured by:
Cisco Systems, Inc.
5030 Sugarloaf Parkway
Lawrenceville, Georgia 30044 USA
Telephone: 770-236-1077

Canada EMI Regulation

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la class B est conforme à la norme NMB-003 du Canada.

20081121 FCC Standard

AVC VIDEO LICENSE

With respect to each AVC/H.264 product, we are obligated to provide the following notice:

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM.

Accordingly, please be advised that service providers, content providers, and broadcasters are required to obtain a separate use license from MPEG LA prior to any use of AVC/H.264 encoders and/or decoders.

Macrovision Copyright Notice

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Disclaimer

Cisco Systems, Inc. assumes no responsibility for errors or omissions that may appear in this guide. We reserve the right to change this guide at any time without notice.

Cisco Explorer 4642HDC and 4652HDC High-Definition Set-Tops with Multi-Stream CableCARD Interface

Welcome

The Cisco® Explorer® 4642HDC and 4652HDC High-Definition Set-Tops deliver high-definition programming with exceptional picture and audio quality. Additionally, these set-tops support MoCA™ (Multimedia over Coax Alliance), which lets subscribers use their cable wiring for LAN connections. Through the 4642HDC and 4652HDC you can also access interactive services, such as video-on-demand and pay-per-view programs. Contact your service provider for information about these and other available services. Use the instructions in this guide to install the 4642HDC and 4652HDC and to access your program services.

The consumer support website provides news and information about this product. For more information, please refer to http://www.cisco.com/web/consumer/support/index.html

Safety First

Before using this set-top, read the IMPORTANT SAFETY INSTRUCTIONS section of this guide.

Watch TV

Press the following remote control keys to access services and programs:

- Guide–Display the on-screen program guide
- Arrows–Highlight a program in the schedule
- Info–Display program description
- Select–Watch a specific program in the guide

Avoid Screen Burn-In

Images such as letterbox bars or side bars, bright closed-captioning backgrounds, station logos, or any other stationary images may cause the HDTV screen to age unevenly and cause damage to your HDTV. Refer to the user guide that came with your HDTV for more information about screen burn-in.

Automatic Software Updates

A message appears on the TV screen when the set-top and the Multi-Stream CableCARD™ (M-Card™) module are receiving software updates. In addition, download information also appears on the front panel of the set-top during these updates. Wait for the current time to display on the front panel before continuing. When the time appears, the update is complete.

Performance Tips

If the set-top does not perform as expected, the following tips may help.

No picture

- Verify that the M-Card module is installed.
- Verify that the power to your TV is turned on.
- If the set-top is plugged into a wall switch, verify the switch is in the ON position. (Avoid plugging into an outlet that is controlled by a wall switch.)
- Verify that all cables are properly connected.
- The current channel may not be available in your service package. Try selecting another channel to see if a picture appears.
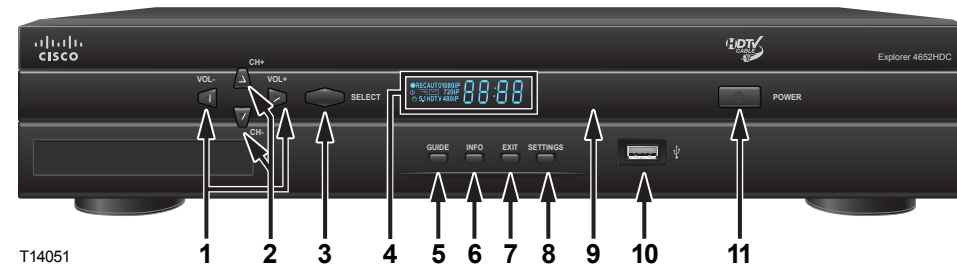
No color

- Verify that the HDTV is in HD mode. If necessary, re-run the HDTV Setup Wizard to select HD mode.
- Verify the current TV program is broadcast in color.
- Adjust the TV color controls.

No sound

- If your setup includes a VCR or stereo, verify that you have properly connected them to the set-top.
- Verify the volume is turned up.
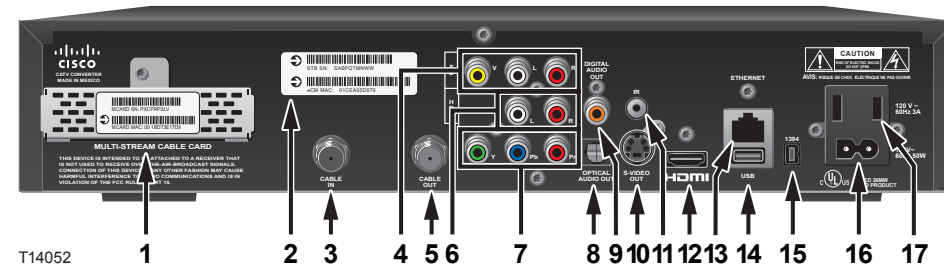- Verify the mute function is not on.

Front Panel

T14051

Note: This illustration may vary from the actual product.

1	VOL +, VOL -	Increases and decreases the volume
2	CH+, CH -	Scrolls up and down through the channels
3	Select	Provides access to your on-screen selection
4	Display	Displays the selected channel number and time of day. The display shows the following:

- Record (●REC)
- Power (⏻)
- 5.1
- Auto
- Message (✉)
- HDTV
- 1080i / 1080P
- 720i / 720P
- 480i / 480P
- MoCA™ Link (⌂)

5	Guide	Accesses on-screen services, such as the on-screen guide, video-on-demand, or pay-per-view
6	Info	Displays a description of the selected program. This button is available from the on-screen guide and while viewing a program
7	Exit	Exits menus, the on-screen guide, and program information
8	Settings	Provides access to the Settings menu
9	IR Sensor	Receives the infrared signal from the remote control
10	USB Port	Connects to external equipment, such as a keyboard or mouse (reserved for future use)
11	Power	Turns the set-top on and off

Safety and Performance Tips

- Keep the top of the set-top free of all objects and electronic devices, including your TV.
- Always set the set-top on its feet, never on its side.

Back Panel

T14052

Note: This illustration may vary from the actual product.

1	Multi-Stream CableCARD	Slot for M-Card module, which decrypts subscription digital channels. This set-top will not operate correctly without an M-Card module, which is installed by your service provider
2	Bar Code Label	Contains set-top serial number and MAC address
3	Cable In	Connects to a coaxial cable that delivers the signal from your service provider
4	Audio/Video Out 2	Connects to either a VCR or to another set of inputs (composite) on your TV
5	Cable Out	Connects to a coaxial cable that sends analog audio and video signals to a TV or VCR. These signals are standard-definition TV (SDTV) video and stereo audio
6	Audio Out (Left, Right)	Connects to RCA cables that send analog audio signals (left and right) to the stereo inputs on a TV
7	HDTV (YPbPr)	Connects to the component video input (YPbPr) on the HDTV, when in HD mode
8	Optical Audio Out	Connects to an optical cable that sends a digital audio signal to a surround-sound receiver or other digital audio device
9	Digital Audio Out	Connects to an RCA cable that sends a digital audio signal to a surround-sound receiver or other digital audio device
10	S-Video Out	Connects to an S-Video cable that sends an S-Video signal to your TV or VCR. This signal is standard definition, but higher quality than other SDTV connections
11	IR	Available to be connected to an approved remote IR receiver (purchased separately). Please contact your service provider for details
12	HDMI	Connects an HDMI™ cable to the HDMI input of an HDTV. HDMI supports both digital audio and video. May be used to connect to a DVI interface using an HDMI-to-DVI adapter for video and separate audio connections. Any of the following audio connections may be used: Audio Out: Left, Right (6); Optical Audio Output (8); or Digital Audio Out (9)
13	Ethernet	Connects to an Ethernet network
14	USB	Connects to external USB devices such as a keyboard or a mouse
15	1394	Connects to display devices that are equipped with a 1394 input
16	AC Power Input	Connects to the power cord to deliver power to the set-top
17	AC Outlet	Connects to the AC power cord from another device, such as a TV

Connecting to an HDTV with Component Input (YPbPr)

Use the connection diagram and follow these steps to connect the set-top to an HDTV that has a component video connector (YPbPr) and an audio left/right connector.

1. Connect the set-top to the coaxial cable coming from the wall.
2. Connect the Y (green) connector on the HDTV to the Y (green) connector on the set-top; connect the Pb (blue) connector on the HDTV to the Pb (blue) connector on the set-top; and connect the Pr (red) connector on the HDTV to the Pr (red) connector on the set-top.
3. Connect the left audio (white) connector on the HDTV to the left audio (white) connector on the set-top, and connect the right audio (red) connector on the HDTV to the right audio (red) connector on the set-top.
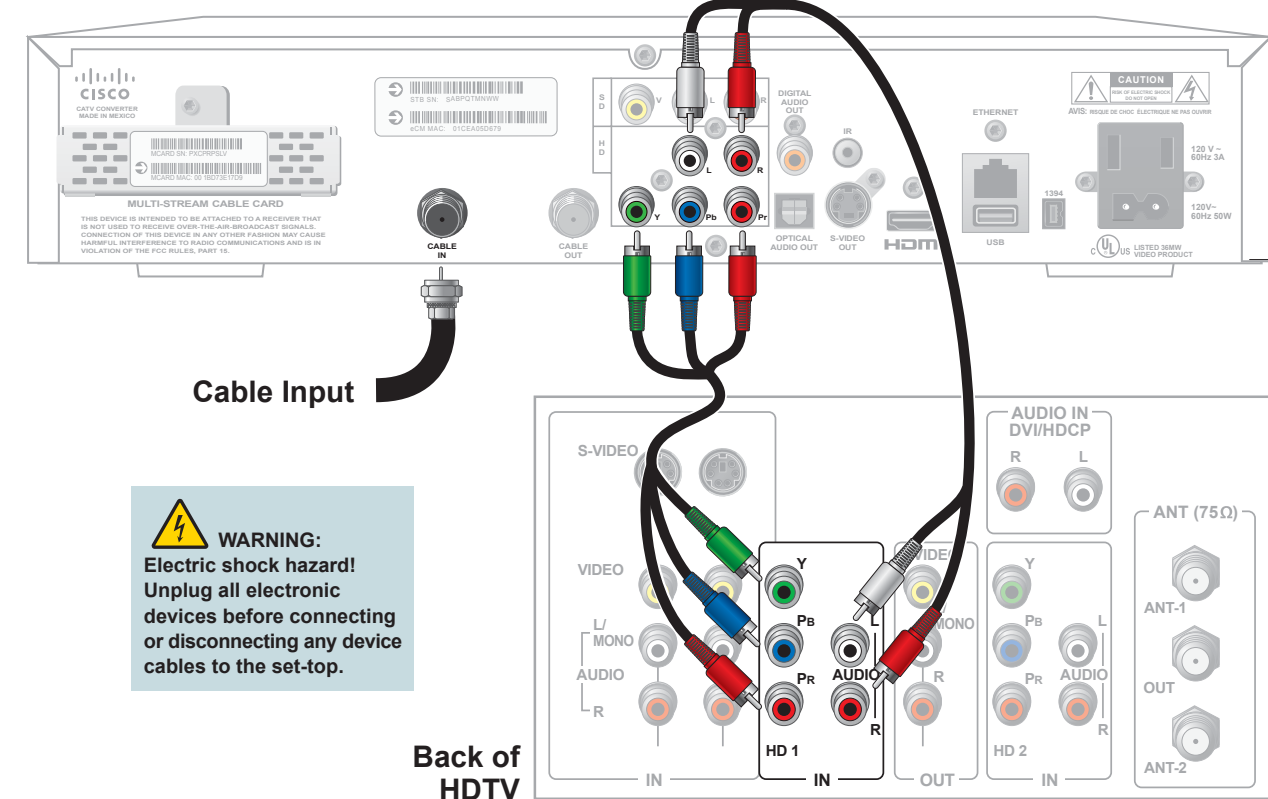4. Plug the set-top and the HDTV into an AC power source.

   Important: To potentially protect the set-top from power surge damage, ground (earth) your cable product to provide some protection against voltage surges and built-up static charges. You may be able to reduce the risk of damage from voltage surges, which can be caused by lightning storms and power outages, by plugging the set-top into a surge protector.

5. Wait several minutes for the set-top to receive the latest software, programming, and service information. When you see one of the following displays on the front panel of the set-top, that indicates that the update is complete:

   • Current time   • Four dashes (----)

   Note: If four dashes are displayed, you must call your service provider to get the set-top authorized.

6. To begin watching TV, turn on the HDTV and press Power on the front panel of the set-top, or press Power on the remote control.

4652HDC

Cable Input

⚠ **WARNING:**
Electric shock hazard! Unplug all electronic devices before connecting or disconnecting any device cables to the set-top.

Back of HDTV

T14053

U.S. Patents

A patent notice is affixed to this product. In addition, the product may also be covered by one or more of the following patents:

4,498,169; 4,692,919; 4,748,667; 4,829,569; 4,866,770; 4,885,775; 4,888,799; 4,890,319; 4,922,456; 4,922,532; 4,924,498; 4,965,534; 4,991,011; 5,003,384; 5,012,510; 5,029,207; 5,045,816; 5,053,883; 5,054,071; 5,058,160; 5,142,575; 5,142,690; 5,146,526; 5,155,590; 5,214,390; 5,225,902; 5,225,925; 5,235,619; 5,237,610; 5,239,540; 5,241,610; 5,247,364; 5,255,086; 5,257,403; 5,267,071; 5,270,809; 5,271,041; 5,272,752; 5,282,028; 5,285,497; 5,287,351; 5,301,028; 5,309,514; 5,317,391; 5,319,709; 5,341,425; 5,347,388; 5,347,389; 5,357,276; 5,359,601; 5,361,156; 5,367,571; 5,379,141; 5,379,145; 5,381,481; 5,390,337; 5,400,401; 5,406,558; 5,418,782; 5,420,866; 5,420,923; 5,425,101; 5,428,404; 5,430,568; 5,434,610; 5,436,749; 5,438,370; 5,440,632; 5,442,472; 5,455,570; 5,457,701; 5,471,492; 5,477,199; 5,477,262; 5,477,282; 5,477,370; 5,481,389; 5,481,542; 5,485,221; 5,493,339; 5,497,187; 5,500,758; 5,502,499; 5,506,904; 5,519,780; 5,539,822; 5,550,825; 5,579,055; 5,579,057; 5,583,562; 5,592,551; 5,596,606; 5,600,378; 5,602,933; 5,640,388; 5,657,414; 5,675,575; 5,684,876; 5,715,515; 5,724,525; 5,734,822; 5,740,300; 5,742,677; 5,754,940; 5,757,416; 5,771,064; 5,774,859; 5,825,829; 5,826,167; 5,850,305; 5,854,703; 5,870,474; 5,892,607; 5,920,626; 5,923,755; 5,930,024; 5,930,515; 5,937,067; 5,963,352; 5,966,163; 5,982,424; 5,991,139; 5,999,207; 6,005,631; 6,005,938; 6,016,163; 6,028,941; 6,029,046; 6,052,384; 6,055,244; 6,072,532; 6,105,134; 6,148,039; 6,157,719; 6,188,729; 6,195,389; 6,212,278; 6,215,530; 6,219,358; 6,240,103; 6,243,145; 6,246,767; 6,252,964; 6,272,226; 6,292,081; 6,292,568; 6,320,131; 6,374,275; 6,405,239; 6,411,602; 6,417,949; 6,424,714; 6,424,717; 6,433,906; 6,438,139; 6,463,586; 6,467,091; 6,476,878; 6,493,876; 6,510,519; 6,516,002; 6,516,412; 6,526,508; 6,538,595; 6,546,013; 6,560,340; 6,567,118; 6,570,888; 6,622,308; 6,629,227; 6,664,984; 6,667,994; 6,671,879; 6,674,967; 6,678,891; 6,714,598; 6,721,352; 6,721,956; 6,725,459; 6,738,982; 6,744,892; 6,744,967; 6,751,271; 6,760,918; 6,795,972; 6,802,077; 6,804,708; 6,811,447; 6,817,028; 6,822,972; 6,823,385; 6,832,386; 6,845,106; 6,868,473; 6,874,075; 6,889,191; 6,909,471; 6,917,622; 6,917,628; 6,922,412; 6,927,806; 6,928,656; 6,931,058; 6,937,729; 6,969,279; 6,971,008; 6,971,121; 6,978,310; 6,986,156; 6,988,900; 6,996,838; 7,010,801; 7,053,960; 7,065,213; 7,069,578; 7,069,572; D348065; D354959; D359737; D363932; D390217; D434753; D507240; D507535; D513407; D516518; RE36368; RE36988

20070417 Patents