

## Notice to CATV Installers

The servicing instructions in this notice are for use by qualified service personnel only. To reduce 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 (U.S.A. and Canada Only)

This reminder is provided to call the system installer's attention to Article 820-93 and Article 820-100 of the NEC (Canadian Electrical Code Part 1), that provide guidelines for proper grounding and, in particular, specify that the metallic sheath of communications cables shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



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.



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 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.

20061116SISD

## IMPORTANT SAFETY INSTRUCTIONS

### Read These Instructions

Read all the safety and operating instructions before you operate this product.

### Retain These Instructions

Retain these safety and operating instructions for future reference.

### Heed All Warnings

Adhere to all warnings on the product and in the operating instructions.

### Follow All Instructions

Follow all operating and use instructions.

### 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. For products intended to operate from battery power or other sources, refer to the operating instructions.

### Ground the Product



**WARNING: Avoid electric shock and fire hazard! 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 is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.**

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

### Protect the Product from Lightning

For added protection, unplug this apparatus during lightning storms or when unused for long periods of time. This may prevent damage to the product due to lightning and power-line surges.

### 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 goes 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.**

### Prevent Power Cord Damage

Protect the power cord from being walked on or pinched by items placed upon or against them, particularly at plugs, convenience receptacles, and the point where the cord exits from the apparatus.

### Provide Ventilation and Select a Location

- Slots and openings in the cabinet of this product are provided for ventilation to ensure reliable operation and to protect it from overheating. Adhere to the following requirements:
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 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 near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 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 install this product on a wall or ceiling unless recommended by the manufacturer and completed in accordance with their instructions.

### Protect from Exposure to Moisture and Foreign Objects

Do not use this apparatus near water, such as near a bath tub, wash bowl, kitchen sink, or laundry tub. Do not use this product in a wet basement or near a swimming pool.



**WARNING: Avoid electric shock and fire hazard! Do not expose this product to liquids, rain, or moisture.**



**WARNING: Avoid electric shock! Unplug this product before cleaning. Clean only with a dry cloth. 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.**

### Accessories Warnings



**WARNING: Avoid potential for electric shock or fire. Only use attachments/accessories specified by your service provider or the manufacturer.**

### 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. Refer all servicing to qualified service personnel.**

Unplug this product and then obtain service when the product has been damaged in any way, such as when the power-supply cord or plug is damaged, when liquid has been spilled or objects have fallen into the product, when the product has been exposed to rain or moisture, when the product has been dropped, and when the product does not operate normally. Adjust only those controls that are covered by the operating instructions as improper adjustment could result in damage and may require extensive work by a qualified technician to restore the product to its normal operation.

### 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.



**WARNING: Avoid personal injury and damage to this product! 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.**

### Outdoor Grounding System

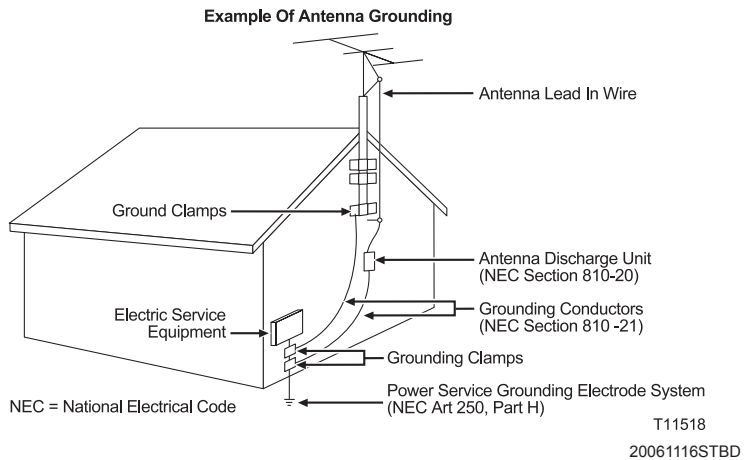
If this product connects to an outdoor antenna or cable system, be sure the antenna or cable system is grounded (earthed). This provides some protection against voltage surges and built-up static charges.

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: To avoid electric shock, 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.**



## FCC Compliance

### 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, if applicable.
- 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 cable company or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Scientific-Atlanta, 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 cable service provider for any questions you may have regarding the operation or installation of this device.

## FCC 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.

Explorer 8240HDC and 8300HDC Digital Video Recorder  
Model: 8240HDC and 8300HDC DVR  
Manufactured by: Scientific-Atlanta, 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.

20060628FDC

## Disclaimer

Scientific-Atlanta, Inc. assumes no responsibility for errors or omissions that may appear in this guide. Scientific-Atlanta reserves the right to change this guide at any time without notice.



Scientific Atlanta, A Cisco Company 770.236.5000  
5030 Sugarloaf Parkway, Box 465447,  
Lawrenceville, GA 30042 www.scientificatlanta.com

Scientific Atlanta, the Scientific Atlanta logo, and Explorer are registered trademarks of Scientific-Atlanta, Inc. 8240HDC and 8300HDC are trademarks of Scientific-Atlanta, Inc.

Cisco, Cisco Systems, and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

CableCARD and M-Card are trademarks of Cable Television Laboratories, Inc.

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks of HDMI Licensing LLC.

All other trademarks shown are trademarks of their respective owners.

Product and service availability is subject to change without notice.

© 2006 Scientific-Atlanta, Inc. All rights reserved.

December 2006 Printed in United States of America

Part Number 4013172 Rev B

# Connecting the Explorer® 8240HDC™ and 8300HDC™ DVR with Multi-Stream CableCARD™ Interface



Scientific  
Atlanta  
A CISCO COMPANY

## Welcome!

The Explorer® 8240HDC™ and 8300HDC™ DVRs receive and display digital signals, and they deliver programs in exceptional picture and audio quality. Through the 8240HDC and 8300HDC 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 8240HDC or the 8300HDC and to access your program services.

**Note:** The 8240HDC does not have audio/video inputs on the front panel.

## Safety First

Before using this Digital Video Recorder (DVR), read the IMPORTANT SAFETY INSTRUCTIONS section of this guide.

## Explorer eClub

The online Explorer eClub provides news and information about consumer products. You can access the Explorer eClub on the Internet at the following Web address:

[www.scientificatlanta.com/explorercub](http://www.scientificatlanta.com/explorercub)

## 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's guide that came with your HDTV for more information about screen burn-in.

## Automatic Software Updates

The TV screen displays a message that indicates the DVR is automatically updating its software.

Wait for the current time to display on the front panel of the DVR before continuing. When the front panel displays the time, the update is complete.

**Note:** If you need further assistance, contact your service provider.

## Performance Tips

If the DVR 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 DVR 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.

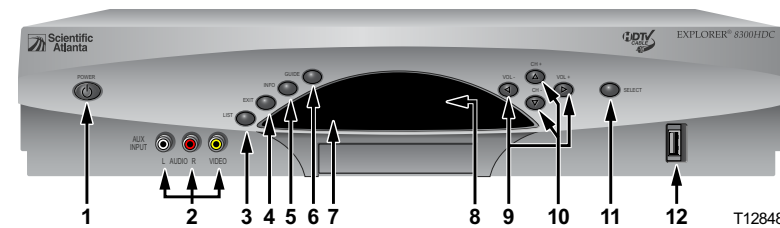
## No color

- 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 DVR.
- Verify the volume is turned up.
- Verify the mute function is not on.

## Explorer 8300HDC DVR Front Panel



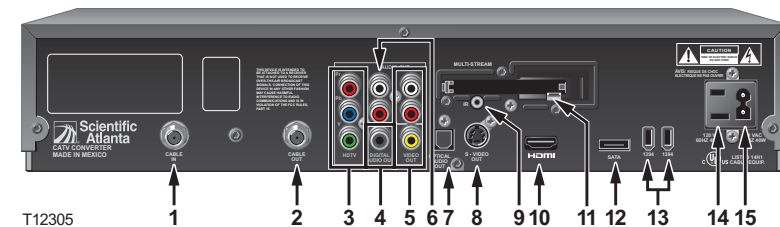
- |                                |   |
|--------------------------------|---|
| <b>1 Power</b>                 | Turns the DVR on and off  |
| <b>2 Video and Audio Input</b> | Not available on the 8240HDC. Connects to video and left/right (L/R) audio outputs of an external device to deliver audio and video to a TV or other device.  |
| <b>3 List</b>                  | Displays the list of recorded programs  |
| <b>4 Exit</b>                  | Exits menus, the on-screen guide, and program information   |
| <b>5 Info</b>                  | Displays a description of the selected program. This button is available from the on-screen guide and while viewing a program   |
| <b>6 Guide</b>                 | Accesses on-screen services, such as the on-screen guide, video-on-demand, or pay-per-view  |
| <b>7 IR Sensor</b>             | Receives the infrared signal from the remote control  |
| <b>8 LED Display</b>           | Displays the selected channel number and time of day. The LED also displays the following: <ul style="list-style-type: none"> <li>• Message (  )</li> <li>• HDTV</li> <li>• Power (  )</li> <li>• Output Resolution (1080i, 720p, 480p, or 480i)</li> <li>• RECORD</li> <li>• AUTO - Automatically outputs native scan rates that your TV can accept</li> </ul> |
| <b>9 VOL +, VOL -</b>          | Increases and decreases the volume  |
| <b>10 CH+, CH -</b>            | Scrolls up and down through the channels  |
| <b>11 Select</b>               | Provides access to your on-screen selection   |
| <b>12 USB Port</b>             | Connects to external equipment, such as a keyboard or mouse (reserved for future use)   |

**Note:** This illustration may vary from the actual product.

**Safety and Performance Tips**

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

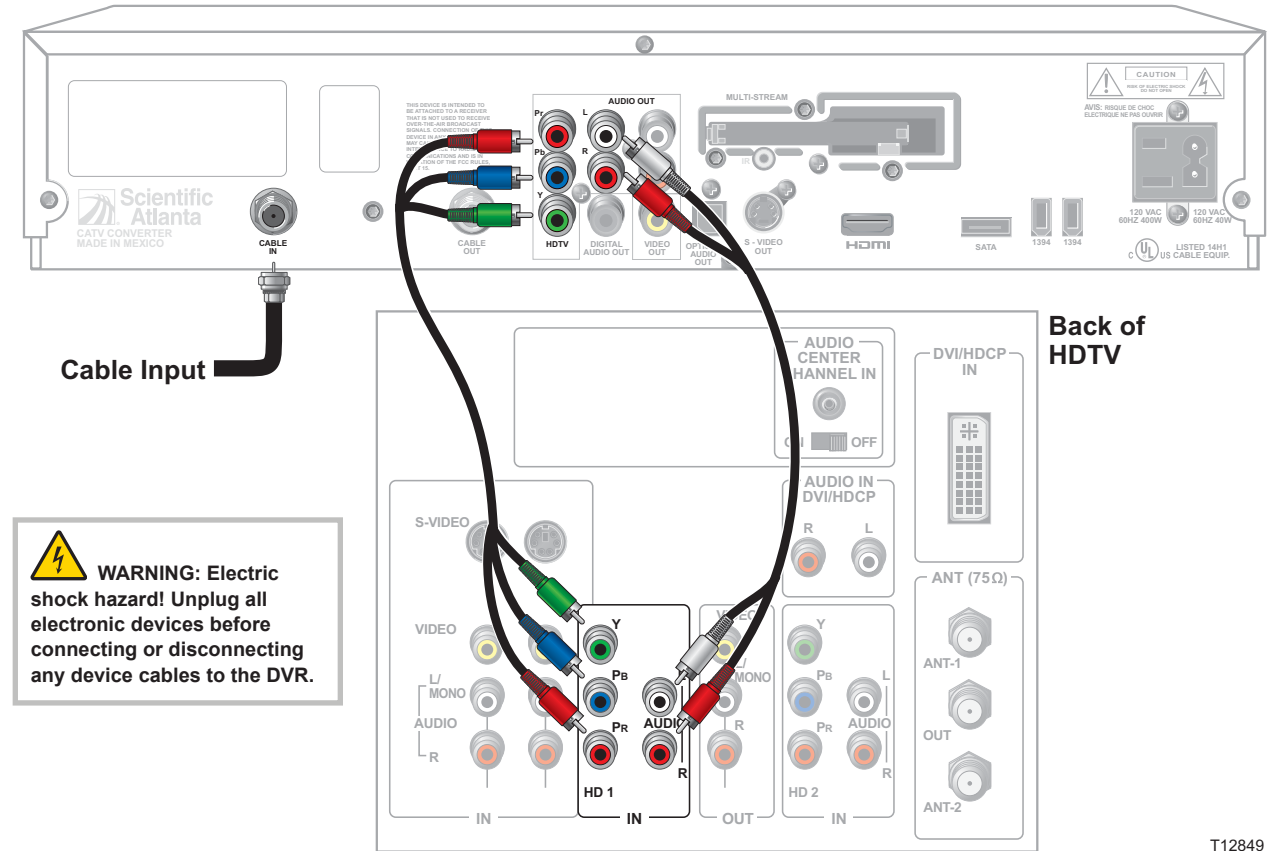
## Explorer 8240HDC and 8300HDC DVR Back Panel



- |   |   |
|---|---|
| <b>1 Cable In</b>                           | Connects to a coaxial cable that delivers the signal from your service provider   |
| <b>2 Cable Out</b>                          | 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  |
| <b>3 HDTV</b>                               | Connects to the component video input (YPbPr) on the HDTV, when in HD mode. When in SD mode, the Y/V portion of the component video output connects to the composite video input of a TV  |
| <b>4 Digital Audio Out</b>                  | Connects to an RCA cable that sends a digital audio signal to a surround-sound receiver or other digital audio device   |
| <b>5 Out 2 (Secondary Video/ Audio Out)</b> | Connects to either a VCR for archiving saved content from the DVR or connects to another set of inputs (composite) on your TV   |
| <b>6 Audio Out (Left, Right)</b>            | Connects to RCA cables that send analog audio signals (left and right) to the stereo inputs on a TV   |
| <b>7 Optical Audio Output</b>               | Connects to an optical cable that sends a digital audio signal to a surround-sound receiver or other digital audio device   |
| <b>8 S-Video Out</b>                        | 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   |
| <b>9 IR</b>                                 | Connector reserved for future use   |
| <b>10 HDMI</b>                              | 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 adaptor for video and separate audio connections. Any of the following audio connections may be used: Digital Audio Out (4); Audio Out: Left, Right (6); or Optical Audio Output (7) |
| <b>11 M-Card Interface</b>                  | Slot for Multi-Stream CableCARD™ (M-Card™) module, which decrypts subscription digital channels. This DVR will not operate correctly without an M-Card module. Obtain an M-Card module from your service provider   |
| <b>12 SATA</b>                              | Connects to an external Serial ATA (eSATA) hard disk drive for expanded recording capacity. Ask your service provider for a list of approved hard drive models for use with the DVR   |
| <b>13 1394 Firewire</b>                     | Connects to display devices that are equipped with a 1394 input   |
| <b>14 AC Outlet</b>                         | Connects to the AC power cord from another device, such as a TV   |
| <b>15 AC Power Input</b>                    | Connects to the power cord to deliver power to the DVR  |

**Note:** This illustration may vary from the actual product.

## Explorer 8240HDC and 8300HDC DVR



## Connecting the 8300HDC DVR to an HDTV with Component Input (Y/V PbPr)

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

1. Insert the M-Card module if not already installed.
2. Connect the DVR to the coaxial cable coming from the wall.
3. Connect the Y (green) connector on the HDTV to the Y (green) connector on the DVR; connect the Pb (blue) connector on the HDTV to the Pb (blue) connector on the DVR; and connect the Pr (red) connector on the HDTV to the Pr (red) connector on the DVR.
4. Connect the left audio (white) connector on the HDTV to the left audio (white) connector on the DVR, and connect the right audio (red) connector on the HDTV to the right audio (red) connector on the DVR.
5. Plug the DVR and the HDTV into an AC power source.

**Important:** To potentially protect the DVR 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 DVR into a surge protector.

6. Wait several minutes for the DVR to receive the latest software, programming, and service information. When you see one of the following displays on the front panel of the DVR, 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 DVR authorized.

7. To begin watching TV, turn on the HDTV and press Power on the front panel of the DVR, or press Power on the remote control.

## 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; 4,636,852; 4,641,181; 4,651,208; 4,691,353; 4,692,919; 4,698,598; 4,719,642; 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; 5,477,370; 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; 5,740,300; 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; D348065; D354959; D359737; D363932; D390217; D434753; D507240; D507535; RE36368; RE36988

20051216PL