

Notice for 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

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 800-93 and Article 800-100 of the NEC (or Canadian Electrical Code Part 1), which provides guidelines for proper grounding of the coaxial cable shield.



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.

20070131 SysInstaller 820 US/Canada/Intl



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.

IMPORTANT SAFETY INSTRUCTIONS

Read These Instructions

Keep These Instructions

Heed All Warnings

Follow All 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.

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 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.

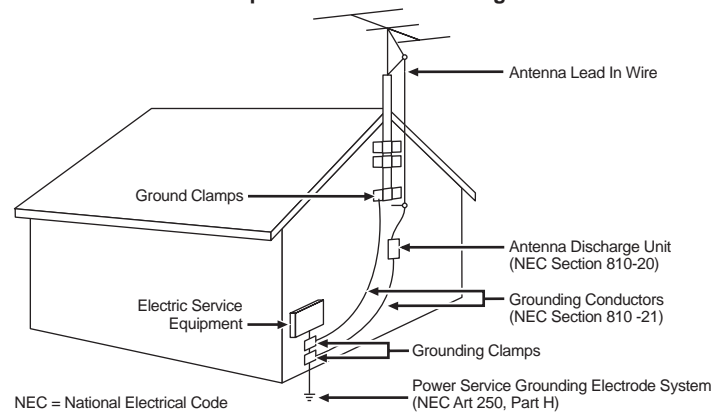
Article 810 of the National Electric Code (NEC) ANSI/NFPA No. 70-1990, provides the following information:

- 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: 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.

Example Of Antenna Grounding



NEC = National Electrical Code

Protect the Product from Lightning

For added protection, unplug this apparatus during lightning storms or when unused for long periods of time. 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 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, particularly at plugs, convenience receptacles, and the point where the cord exits from the apparatus.

Provide Ventilation and Select a Location

- 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.

Protect from Exposure to Moisture and Foreign Objects

Do not use this apparatus near water.



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 Warning



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.

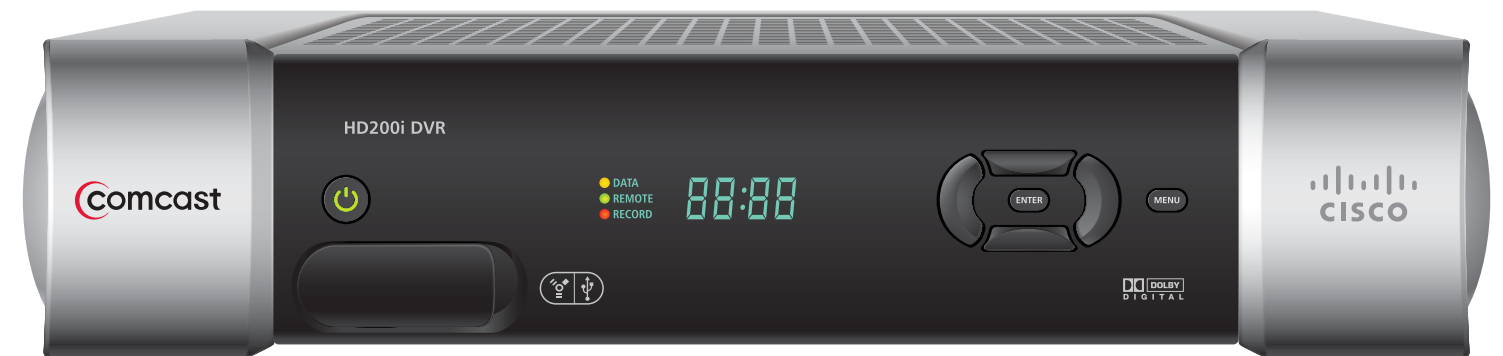


WARNING: Avoid personal injury and damage to this product! Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

20070320 Set-Top Cable US & Canada



Connecting the Explorer® RNG 200™ DVR with M-Card™ Interface



Compliance Information

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

Explorer® RNG 200™ Digital Video Recorder
Model: RNG 200
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.

20060628 FCC Standard

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.

AVC Video License

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

Manufactured under license from Dolby Laboratories.

"Dolby" and the double-D symbol are registered trademarks of Dolby Laboratories.

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered 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.

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May 2007 Part Number 4012607 Rev B

Welcome!

The Explorer® RNG 200™ DVR with a Multi-Stream CableCARD™ (M-Card™) interface (DVR) receives and displays digital signals, and it delivers programs in exceptional picture and audio quality. Through the DVR, 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 DVR and to access your program services.

Safety First

Before using this 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/explorerclub

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 a program description
- **Select** – Watch a specific program in the guide

Performance Tips

If the DVR does not perform as expected, the following tips may help. If you need further assistance, contact your service provider.

No Picture

- Verify that the power to your TV is turned on.
- If the DVR is plugged into a wall switch, verify that the switch is in the ON position. (Avoid plugging the DVR 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.

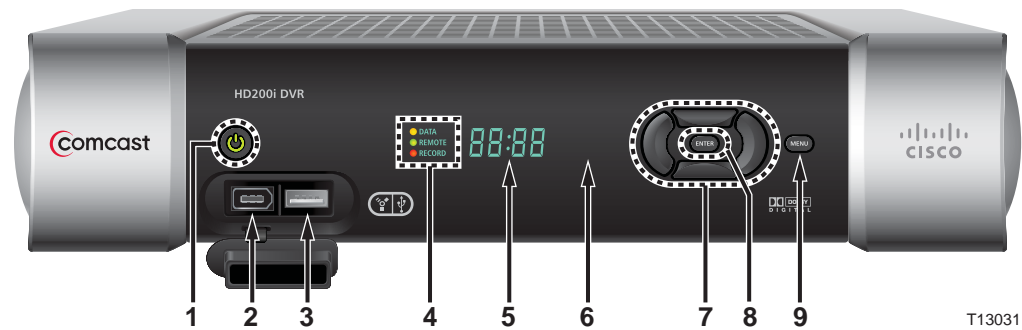
No Color

- Verify that the TV program is broadcast in color.
- Adjust the TV color controls.

No Sound

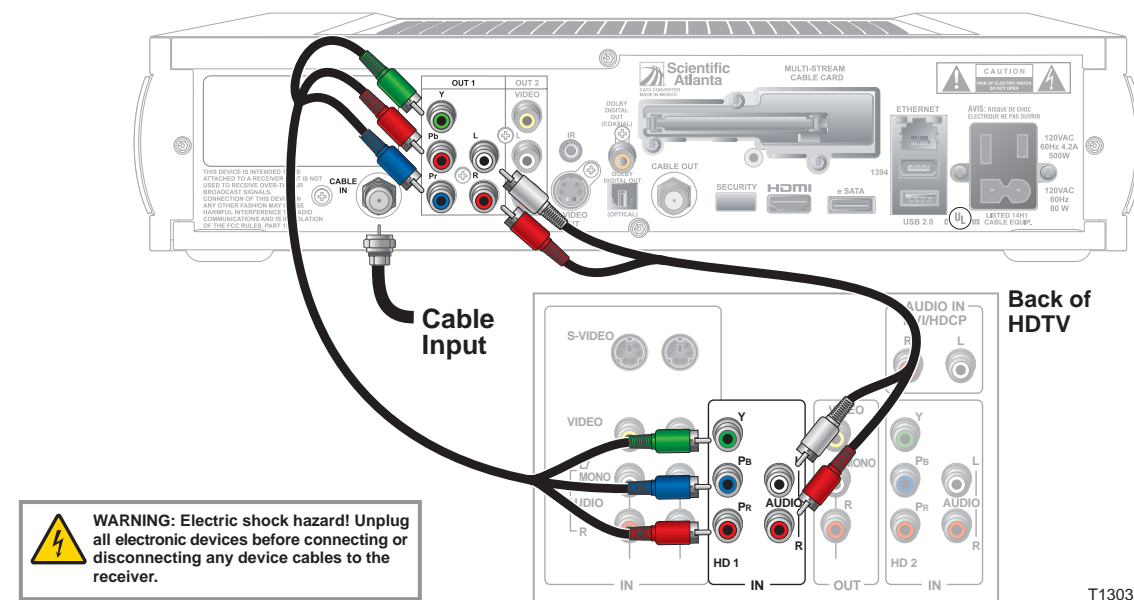
- If your setup includes a VCR or stereo, verify that you have properly connected them to the DVR.
- Verify that the volume is turned up.
- Verify that the mute function is not on.

Explorer RNG 200 DVR Front Panel



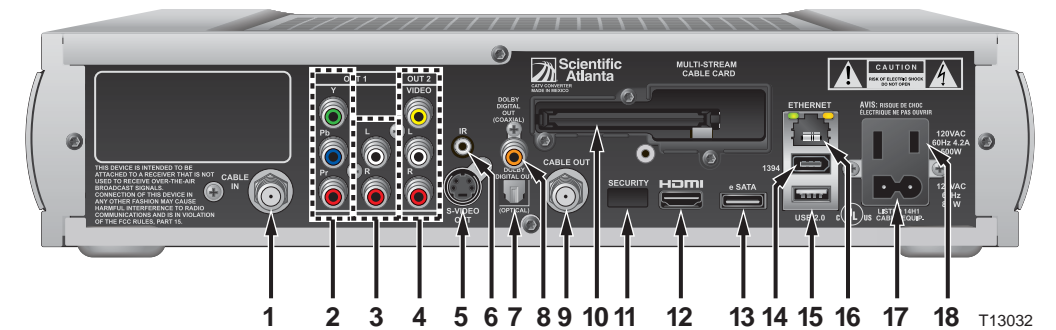
- | | | |
|---|-----------------------|--|
| 1 | Power | Turns the DVR on and off |
| 2 | 1394 | Connects to display devices equipped with a 1394 input |
| 3 | USB Port | Connector reserved for future use |
| 4 | LED Indicators | Displays the following set-top status indicators: <ul style="list-style-type: none"> • Data – Indicates data transfer status (Yellow LED) • Remote – Indicates remote control activity (Green LED) • Record – Indicates that a recording is in progress (Red LED) |
| 5 | LED Display | Displays the selected channel number and time of day |
| 6 | IR Sensor | Receives the infrared signal from the remote control |
| 7 | Arrow Keys | Accesses on-screen services such as the on-screen guide, video-on-demand, or pay-per-view |
| 8 | Enter | Provides access to your on-screen selection |
| 9 | Menu | Accesses the on-screen menu |

Connecting the Explorer RNG 200 DVR



1. Connect the DVR to the HDTV as shown in the diagram.
2. Connect the DVR to the coaxial cable coming from the wall.
3. Plug the DVR and HDTV into an AC power source. **Important!** Do not press the Power key on the DVR yet.
4. Wait for the time to appear on the LED display. **Important!** Wait 2 to 3 minutes for the DVR to be updated with the latest programming and service information. When the front panel displays the time, the update is complete.
5. Press the Power key on the DVR.
6. Turn on the power to your HDTV, and set the input channel assigned by your service provider (channel 3 or 4).

Explorer RNG 200 DVR Back Panel



- | | | |
|----|--|--|
| 1 | Cable In | Connects to a coaxial cable that delivers the signal from your service provider |
| 2 | Y/Pb/Pr | Connects the DVR to the component video input (Y/Pb/Pr) on the HDTV |
| 3 | Audio Out (Left, Right) | Connects to RCA cables that send analog audio signals (left and right) to the stereo inputs on an HDTV |
| 4 | Out 2 (Secondary Video/Audio Out) | Connects to either a VCR for archiving saved content from the DVR or connects to another set of inputs (composite) on your TV |
| 5 | 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 |
| 6 | IR | Connector reserved for future use |
| 7 | Dolby® Digital Out (Optical) | Connects an optical cable to send a digital audio signal to a surround-sound receiver or other digital audio device |
| 8 | Dolby Digital Out (Coaxial) | Connects an RCA cable to send a digital audio signal to a surround-sound receiver or other digital audio device |
| 9 | 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 |
| 10 | M-Card Interface | Slot for M-Card module, which decrypts subscription digital channels. Obtain an M-Card module from your service provider |
| 11 | Security | Connector reserved for future use |
| 12 | HDMI | Connects the HDTV HDMI™ connector to the HDMI port. HDMI supports both digital audio and video. May be used to connect to a DVI interface using an adaptor for video and separate audio connections. You can use any of the following audio connections: Dolby Digital Out [Coaxial] (8), Audio Out [LEFT and RIGHT] (3), or Dolby Digital Out [Optical] (7) |
| 13 | eSATA | Connects to an external Serial ATA (eSATA) hard disk drive for expanded drive space. (An eSATA drive is not an archival device.) Check with your service provider for a list of approved hard drive models for use with the DVR |
| 14 | 1394 | Connects to display devices equipped with a 1394 input |
| 15 | USB Port | Connector reserved for future use |
| 16 | Ethernet | Connector reserved for future use |
| 17 | AC Power | Connects to the power cord to deliver power to the DVR |
| 18 | AC Outlet | Connects to the AC power cord from another device, such as an HDTV |

U.S. Patents

A patent notice is affixed to this product. In addition, this product could 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; 6,817,026; 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