[DESCRIPTION]

[New Feature]收音机播放时，按下耳机hook键，收音机暂停；若再次按hook键，收音机又会播放

[SOLUTION]

 一、 修改FmRadioService.java  
1.在文件头部添加:  
 import android.content.ComponentName;

 import android.media.RemoteControlClient;  
 import android.media.RemoteControlClient.MetadataEditor;  
2.在FmRadioService类的开始处添加如下:  
 private static final String TAG = "FmRx/Service“;  
  //添加以下  
  public static final String CMDTOGGLEPAUSE = "togglepause";  
  public static final String CMD= "command";  
  public static final String CMDNEXT = "cmdnext";   
  private RemoteControlClient mRemoteControlClient;  
  private ComponentName mFMMediaButtonIntentReceiver = null;  
  //添加以上     
  
二、在alps\vendor\mediatek\proprietary\packages\apps\FmRadio\src\com\mediatek\fmradio下面添加一支文件:  
文件名为：FMMediaButtonIntentReceiver.java  
  
package com.mediatek.fmradio;  
import android.content.BroadcastReceiver;  
import android.content.Context;  
import android.content.Intent;  
import android.media.AudioManager;  
import android.os.Handler;  
import android.os.Message;  
import android.view.KeyEvent;  
import android.util.Log;  
import android.app.ActivityManager;  
import android.app.ActivityManager.RunningServiceInfo;  
import java.util.List;  
  
public class FMMediaButtonIntentReceiver extends BroadcastReceiver {  
  public static final String TAG = "FmRx/Receiver";  
    @Override  
    public void onReceive(Context context, Intent intent) {  
        Log.d(TAG, " mFMMediaButtonIntentReceiver onReceive");  
         String Iaction = intent.getAction();  
            if (Intent.ACTION\_MEDIA\_BUTTON.equals(Iaction)) {  
              Log.d(TAG, " mFMMediaButtonIntentReceiver onReceive ACTION\_MEDIA\_BUTTON");  
              KeyEvent event = (KeyEvent)intent.getParcelableExtra(Intent.EXTRA\_KEY\_EVENT);  
              if (event == null) {  
                  return; }  
             int keycode = event.getKeyCode();  
             int action = event.getAction();  
             long eventtime = event.getEventTime();  
             Log.d(TAG, "onReceive keycode="+keycode+",action="+action);  
               
             String command = null;  
             switch (keycode) {  
                 case KeyEvent.KEYCODE\_MEDIA\_STOP:  
                     break;  
                 case KeyEvent.KEYCODE\_HEADSETHOOK:  
                 case KeyEvent.KEYCODE\_MEDIA\_PLAY\_PAUSE:  
                    command = FmRadioService.CMDTOGGLEPAUSE;  
                     break;  
                 case KeyEvent.KEYCODE\_MEDIA\_NEXT:       
                     break;  
                 case KeyEvent.KEYCODE\_MEDIA\_PREVIOUS:                    
                     break;  
                 case KeyEvent.KEYCODE\_MEDIA\_PAUSE:  
                     break;  
                 case KeyEvent.KEYCODE\_MEDIA\_PLAY:  
                     break;  
                 /// M: AVRCP and Android Music AP supports the FF/REWIND @{  
                 case KeyEvent.KEYCODE\_MEDIA\_FAST\_FORWARD:  
                     break;  
                 case KeyEvent.KEYCODE\_MEDIA\_REWIND:  
                     break;  
                 default:  
                     break;  
                }  
                 if (command != null) {  
                  if ((action == KeyEvent.ACTION\_DOWN) && (event.getRepeatCount() == 0)) {  
                          sendToStartService(context, command);}   
                  if (isOrderedBroadcast()) {  
                     abortBroadcast();}  
                 }}  }  
  
      public void sendToStartService(Context context, String command) {  
          Intent i = new Intent(context, FmRadioService.class);  
          i.putExtra(FmRadioService.CMD, command);  
          context.startService(i);    }  
}  
三、在FmRadioService类的onCreate方法中添加如下:  
@Override  
    public void onCreate() {  
        ……  
   //添加以下  
  Log.d(TAG, "registerMediaButtonEventReceiver.mFMMediaButtonIntentReceiver" );  
        AudioManager am = (AudioManager) getSystemService(Context.AUDIO\_SERVICE);  
        ComponentName mFMMediaButtonIntentReceiver = new ComponentName(getPackageName(),  
                FMMediaButtonIntentReceiver.class.getName());  
        am.registerMediaButtonEventReceiver(mFMMediaButtonIntentReceiver);  
    
        Intent i = new Intent(Intent.ACTION\_MEDIA\_BUTTON);  
        i.setComponent(mFMMediaButtonIntentReceiver);  
        PendingIntent pi = PendingIntent.getBroadcast(this /\*context\*/,  
                0 /\*requestCode, ignored\*/, i /\*intent\*/, 0 /\*flags\*/);  
        mRemoteControlClient = new RemoteControlClient(pi);  
        mAudioManager.registerRemoteControlClient(mRemoteControlClient);  
    
        int flags = RemoteControlClient.FLAG\_KEY\_MEDIA\_PREVIOUS  
                | RemoteControlClient.FLAG\_KEY\_MEDIA\_NEXT  
                | RemoteControlClient.FLAG\_KEY\_MEDIA\_PLAY  
                | RemoteControlClient.FLAG\_KEY\_MEDIA\_PAUSE  
                | RemoteControlClient.FLAG\_KEY\_MEDIA\_PLAY\_PAUSE  
                | RemoteControlClient.FLAG\_KEY\_MEDIA\_STOP;  
        mRemoteControlClient.setTransportControlFlags(flags);  
    //添加以上   
四、在FmRadioService类的onStartCommand方法中添加如下:  
  Log.d(TAG, ">>> FmRadioService.onStartCommand intent: " + intent + " startId: " + startId);  
    //添加如下  
  String cmd = intent.getStringExtra("command");  
  Log.d(TAG, ">>> FmRadioService.onStartCommand command: " + cmd);  
  if( CMDTOGGLEPAUSE.equals(cmd) ){  
   Log.d(TAG, "onStartCommand:CMDTOGGLEPAUSE" );  
     if(!mIsPowerUp){  
    powerUpAsync(FmRadioUtils.computeFrequency(getFrequency()));}  
   else{  
    powerDownAsync();}    
 }  
//添加如上  
五、在FmRadioService类的powerUpFm方法中添加如下:  
private boolean powerUpFm(float frequency) {  
      ……  
      mIsPowerUp = true;         
      setMute(true);    
  //添加以下  
  mRemoteControlClient.setPlaybackState(RemoteControlClient.PLAYSTATE\_PLAYING);  
  //添加以上    
  ……       
}  
六、在FmRadioService类的powerDown方法中添加如下:  
private boolean powerDown() {  
        ……   
        if (!mIsPowerUp) {  
            Log.w(TAG, "Error: device is already power down.");  
            return true;  
        }  
  //添加以下  
  mRemoteControlClient.setPlaybackState(RemoteControlClient.PLAYSTATE\_PAUSED);  
  //添加以上  
 mIsPowerUp = false;  
 ……   }  
七、在FmRadioService类的onDestroy方法中添加如下:  
public void onDestroy() {  
        ……  
        abandonAudioFocus();  
        exitFm();    
  //添加以下  
 Log.d(TAG, "unregisterMediaButtonEventReceiver.mFMMediaButtonIntentReceiver" );  
        AudioManager am = (AudioManager) getSystemService(Context.AUDIO\_SERVICE);  
        am.unregisterMediaButtonEventReceiver(mFMMediaButtonIntentReceiver);    
        mAudioManager.unregisterRemoteControlClient(mRemoteControlClient);  
 //添加以上  ……   
   }  
 八、修改alps\vendor\mediatek\proprietary\packages\apps\FmRadio\AndroidMainfest.xml，添加以下：  
<receiver android:name="com.mediatek.fmradio.FMMediaButtonIntentReceiver">  
            <intent-filter>  
                <action android:name="android.intent.action.MEDIA\_BUTTON" />  
            </intent-filter>  
</receiver>