

**SRVD TREATY  
PROPOSAL FOR PIRACY ERADICATION**

TOPICS

- WHAT IS THE SRVD
- THE OPERATIONAL TECHNICAL FUNCTIONING
- CESSION OF RIGHTS FOR PRIVATE USE - IMPLEMENTATION OF A NEW COMMERCIAL CONCEPT WITH THE USER
- THE MAINTENANCE OF THE COMMERCIAL RELATIONSHIP BETWEEN COMPANIES
- RELATIONSHIP BETWEEN COUNTRIES – CENSORSHIP – RIGHTS, ETC
- SYSTEM ADMINISTRATOR
- SYSTEM'S COPYRIGHTS
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## RE-CRYPTOSYSTEMS OF DIGITAL VIDEOS

As of public knowledge, the commerce of illegal copies is growing in a scary way all over the world.

The treaty shown here proposes a worldwide solution, with the implementation of a system that eliminates the piracy and allows the maintenance of commercial relations, not only between producers and distributors, but also between distributors and points of sale or retailers.

Since it is a complex system that involves technical and market questions, international business and consumers, the text is divided in topics:

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## WHAT IS THE SRVD

In the present model, the reproduction devices have a single code that allows them to reproduce every disc, making it possible that anybody make as many copies as he/she likes of the original movies and distribute them in a random way, since any device will read them.

In the proposal model, each reproduction device will have its own code, through a key of decryption and it will only read recorded discs exclusively made for it. The system it is also applied to other technologies of data transmission, download, blue ray, pent drive, or new technologies that might be created.

On the other hand, the movies will be distributed freely from a matrix that will be encrypted too, because it will not be read in any device. To have access to the movie, the user will make a new recording specific to his/her device.

For an interaction between the distributor matrix and the specific device, we will use SRVD, which is a system that will allow us the re-encryption, rewriting the matrix a new code specific for each device. This way we will eliminate piracy, there won't be more illegal copies and only specific copies, since the original matrix (encrypted) will not be read in any device and the copy (re-encrypted) will be read only in a specific device.

## THE OPERATIONAL TECHNICAL FUNCTIONING

To a better understanding, we need to know what is cryptography. Cryptography is the science that uses mathematic to encrypt and decrypt data. The cryptography allows you to save or transmit information through unsafe systems (like the internet, discs, etc.) in a way that the information cannot be read, unless by the intended device. An algorithm of the cryptography is a mathematic function used in the process of encryption and decryption. An algorithm of cryptography works with a key to encrypt data, the same data can generate different encrypted data using different keys, or, if we change the key to the same set of data it can generate different encrypted data.

The cryptography system used nowadays is extremely safe. Specialists say that for someone break in a cryptography system using 64 bits based on attempt and error; it would take 100.000 years using a regular PC.

To become operational, it will be necessary a creation of a responsible entity for the system management called "COMPANY" that will be responsible for the three phases of the process: reproduction devices, movies and the re-encryption system.

## REPRODUCTION DEVICES:

The "COMPANY" will supply the reproduction devices producers the resources for the implantation of a key of decryption, this key will be exclusive to each reproduction device, this way device 1 will receive key Fd1, and device 2 will receive the key Fd2 and etc, and only the "COMPANY" will keep the codes.

## MOVIES:

The “COMPANY” will encrypt the movies not only by title, but also by country or where they were distributed from, linking this movie to the respective distributor.

This way movie 1 distributed from company “A” will receive the cryptographic key Fc1, the same movie subtitled or dubbed, distributed in other countries from its subsidiary or its commercial partner will receive keys Fc2, Fc3, Fc4... and will be linked to the local distributor’s site, to movie 2,3,4...or company B, C, D... will be given keys Fc5, Fc6, Fc7..., and only the “COMPANY” will keep the codes.

## RE-ENCRYPTION SYSTEM:

The “COMPANY” will maintain an Internet access provider; in its system there will be the keys of decryption of the reproduction devices and encryption of the movies, linking them to its distributors, who hold their copyrights. The access to the system will be exclusively through the distributor’s sites.

The points of sale will be equipped with specific computers and software, where after the movies’ data and the user device are known, the user will access the distributor’s site. The payment will be done using the CESSION OF RIGHTS FOR PRIVATE USE; after the payment is completed automatically, the distributor’s site will access the provider of the “COMPANY”, that will inform the data and ask for the key of re-encryption, passing the information to the computer in use that will start to read the encrypted matrix and rewrite in a new cryptography, that will only be read in the reproduction device which it was destined for (if the user meets all technical conditions, the whole process will be done at home through downloads). This way, for each request, the users will receive a different re-encryption key, having as variables the Title of the movie, the local distributor and the user device.

Movie1 distributor X(keyFc4) + User1(key Fd1) = re-encryption key Fr4->1  
Movie2 distributor X(key Fc8) + User1(key Fd1) = re-encryption key Fr8->1  
Movie1 distributor Y(key Fc4) + User2(key Fd2) = re-encryption key Fr4->2  
Movie2 distributor Y(key Fc8) + User1(key Fd2) = re-encryption key Fr8->2  
Movie1 distributes country W(key Fc7) + User5(key Fd5) = re-encryption key Fr7->5  
Movie2 distributes country W(key Fc9) + User5(key Fd5) = re-encryption key Fr9->5  
Movie2 distributes country Z(key Fc9) + User6(key Fd6) = re-encryption key Fr9->6  
And it continues.....

## CESSION OF RIGHTS FOR PRIVATE USE – IMPLEMENTATION OF A NEW COMMERCIAL CONCEPT WITH THE USER

Nowadays the commercialization of the movies with the final user is summarized in 3 models: RENTAL, RETAIL SALE (SELL-TRHU), VIDEO CLUB and each one has its own advantages and disadvantages:

-RENTAL: better price to the user, although it has two inconveniences: the constant unavailability of movies copied wanted, which many times takes the customer away from the video rental, and the obligation to return the movie, with short deadlines, that can cause delay fees at return.

-RETAIL SALE OR SELL-THRU: it solves the problems of unavailability of the movies and the returning of the movies, but its high cost doesn't let the user watch a greater number of movies, usually giving the options for child movies or erotic movies that are watched many times and will provide the user a better advantage than the rental.

-VIDEO CLUB: it solves the problem of the movies' returning and, in certain aspects, the cost, but it is not satisfactory about the movies availability and it creates the inconvenience about paying a monthly fee even if you haven't used it.

-THE CESSION OF RIGHTS FOR PRIVATE USE: it solves all these questions, since the user will always find the product and doesn't have to return it (like the sell-thru), the user pays the price of a rental and more important, without the obligation of a monthly fee or minimum quantity, because the user can have the movie desired and watch any time he/she would like to.

It is a new model of commerce, so it will not find law barriers.

## MAINTENANCE OF PRESENT COMMERCIAL RELATIONS BETWEEN COMPANIES

Besides meeting all the technical conditions able to offer an individual and exclusive copy to each device, and reducing operational costs of the distributors, the system still allows that the existent commercial structure be maintained, including the international needs, because the same title, distributed in different countries, will have differentiated codes and will be linked to the local distributor.

There should be a concept similar to the shared profit in the relations between distributors and points of sale, since the distributor can sell directly to the public through download, it should have a policy of prices differentiated for the points of sale, supporting them promotionally, the way it is done nowadays. On the relations with the customers, it should be used the concept of cession of rights for private use.

## RELATIONS BETWEEN COUNTRIES – CENSORSHIP – RIGHTS, ETC.

The system will be provided and managed by a central that will need the support of local entities to manage the specifics of each country. This way, in each country it will be

chosen a public entity or association, respecting the region laws, and this one will have the following duties:

- To keep a file of the distributors,
- To approve the contracts, sending them to the movies matrix to the "COMPANY",
- To verify legal questions concerning censorship, international business, etc...

## SYSTEM ADMINISTRATOR

This is an universal system that will involve interest of several companies all over the world, therefore I suggest that the "COMPANY" should be a non-profit organization, receiving from the distributors a fee for each order, for its operational costs, including the royalties for the cession of rights of the system. The MPA should manage it.

## SYSTEM'S COPYRIGHTS

The patent of the technical operational base and the mathematic evidence of the present system are registered under the number PI0604035-7 in Brazilian INPE, which is signatory of Paris convention.

The present document with the operational and commercial summary of the system was registered in the 10° notary's of titles and documents and it will be distributed in the following order:

01/25/2007 - MPA, USA and its representative in Brazil.

03/05/2007 – Representatives entities of the devices produces in United States and Brazil.

04/22/2007 – Government responsible agencies for the fight against piracy in United States and Brazil.

## CONTACT

In case of any doubts, I will be available, because, as I have mentioned, the system is very complex and this is only a brief summary of the procedures.

Sincerely,

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**FLOWCHART:**

