

# System for communication between users and global media-communication network

## Abstract

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3. Patent RU 2289310, "Method of the information receiving about psychophysiological state of live object", IPC<sup>8</sup> filing of application data 16.02.2004, data of publication 20.12.2006,
4. US Patent 7,346,227, Class 382/276I, International Class G06K 9/36, December 14, 2001, February 20, 2004

## Claims

What is claimed is:

1. The system of communication between users and global media-communication network includes:
  - Subsystem of storage and playback of media-products;
  - Subsystem of definition of an emotional-sensual user's profile;
  - Subsystem of a feedback between the user and subsystem of storage and playback of media-products in real time mode;
  - Subsystem of storage of chosen preferences;
  - Subsystem of fixing and storage of sharp changes of emotional state;
  - Subsystem of correction of emotional state;
  - Subsystem of seeking for other users with close emotional-sensual profile;
  - Subsystem of formation/synthesis of the image of user's face;
  - Subsystem of definition of a degree of emotional satiation of the user;
  - Subsystem of formation and storage of typical (usual) day of the user;
  - Subsystem of data processing about emotional-sensual features of a "virtual village";
  - Subsystem for calculation of a rating of authors and entertaining services;
  - Subsystem for calculation of the income of the owner of entertaining service and/or fee payments to the author (artist);
  - Subsystem of forecasting and planning of cost of the future entertaining services (works, products);
  - Subsystem of the new services (works, products) offer for the consumer;
  - Subsystem "a direct media-channel between the artist and consumer in real time mode";

- Subsystem of revealing and forecasting of the nearest needs of the user;  
Subsystem of control of the speed and content of transmitting media product.
2. System of claim 1, in which the feedback in real time mode does not include explicit action of the consumer on estimation of the current media-product or on change of playing media-product by another one. (Explanation: the estimation and change of media-product are carried out not by the user but the automatic device carries it for him).
  3. System of claim 1, in which the subsystem of feedback includes the sensor of emotional state of the user.
  4. System of claim 3, in which the sensor of emotional state is a part of a media-device.
  5. System of claim 1, in which the subsystem of choosing of media-products chooses products which maximize a value of pleasures experienced by the user.
  6. System of claim 5, in which the choice is realized from all media-products available at present time in the given media-system.
  7. System of claim 5, in which the choice is realized from all media-products available at present time in any other media-system.
  8. System of claim 5, in which the choice is realized by optimization of combination of media-products from different media categories, such as, music, video, text and etc.
  9. System of claim 5, in which the choice is realized by testing and/or in view of character of forthcoming occupation of the person.
  10. System of claim 5, in which the testing of emotional state/mood firstly is carried out and then media-product is chosen.
  11. System of claim 10, in which the testing is carried out by presentation to the user of a sequence of media-products using subsystem of storage of chosen preferences.
  12. System of claim 10, in which the testing is carried out by presentation to the user of new media-products.
  13. System of claim 10, in which the advertising clips of the goods and services as new media-products are presented.
  14. System of claim 1, in which the subsystem of storage of chosen preferences systematizes and generalizes preferences of the user and makes his emotional-sensual profile (ESP).
  15. System of claim 14, in which ESP of the user is a key-identifier of the owner of personal mobile media-device.
  16. System of claim 1, in which the subsystem of fixing and storage of sharp change of emotional state has the program of testing of causes on which the person experiences the current emotional state.
  17. System of claim 16, in which the media-device defines the person, communication with which was unpleasant.
  18. System of claim 17, in which at the following contact the system warns and offers to approve/refuse to contact.
  19. System of claim 1, in which the subsystem of correction of emotional state has the program of an automatic choice of media-products using subsystem of storage of chosen preferences.
  20. System of claim 19, in which the subsystem of correction of emotional state has the program-adviser for methods of correction of current emotional state.
  21. System of claim 19, in which there is a set of programs for achievement of the given emotional state before an occurrence of the certain moment in the current person's life, such as, a public speech, a congratulation, a party, appointment and etc.
  22. System of claim 1, in which the subsystem of seek for other users with similar ESP in a media-communication network has the program of presentation of user's ESP for automatic search engines.

23. System of claim 22, in which the subsystem of seeking for users with similar ESP in media-communication network has the program of communication with users having similar ESP and their associations in "virtual villages" by a principle of full emotional-sensual compatibility.
24. System of claim 23, in which the "virtual village" has the set of media-products which are common for all members.
25. System of claim 23, in which the set of media-products is updated by periodic testing of preferences of separate members of "virtual village".
26. System of claim 23, in which members of "virtual village" have an opportunity of simultaneous expression of own feelings in virtual space at simultaneous listening/viewing of products, real events or discussions.
27. System of claim 1, in which the subsystem of formation/synthesis of the image of the user's face is intended for formation of the image under the given emotion for presentation to the current interlocutor using video-communication.
28. System of claim 27, in which formation/synthesis of the face's image is carried out of former recordings of face's expressions disposed in the ascending sort of degree of emotional state.
29. System of claim 27, in which the subsystems of definition of degree of emotional satiation of the user i.e. approach of inhibitory phase of brain activity, switches the user to other kind of activity or rest.
30. System of claim 1, in which the subsystem of formation and storage of typical (usual) day of the user records separate fragments of life for the person's purposes and/or for descendants, for example, what the food the user ate, with whom he communicated, what watched and listened and read.
31. System of claim 14, in which there is a program for adaptation of subsystem of definition of emotional state to psycho-physiological features of the user, which defines a neutral level of emotional state on physiological parameters of organism and definition of range of parameters of emotional state.
32. System of claim 23, in which the members of "virtual village" communicate without intermediaries with authors or owners of media content, for example, artists and organize virtual joint consumption of media-product, for example, arrange a concert.
33. System of claim 23, in which the consumers of media content pay to the author/owner the payment proportionally of received pleasure.
34. System of claim 1, in which the subsystem of data processing about emotional-sensual features of "virtual village" includes items:  
Calculation of an index of preference of the author (artist);  
Calculation of an index of preference of the given type of service (such as show, a genre of movie, a kind of sports, musical style and etc.);  
The store of estimations of costs of entertaining services and indexes of preferences of authors, artists, types of entertaining services and etc.;  
Composing of a general emotional-sensual profile;  
Giving of estimations, indexes and profiles on inquiry of subsystem of forecasting and planning;  
A summator of pleasure of consumers simultaneously consuming entertaining service on each author (artist) and on each type of entertaining services;  
Calculation of rating of authors (artist) and entertaining services.
35. System of claim 1, in which the subsystem for calculation of a rating of authors (artists) and entertaining services is based on definition of the general objective index from the available data on emotional state of audience, for example, as product of quantity of taking part consumers multiplied by an average estimation or index of authors (artists).

36. System of claim 1, in which the subsystem for calculation of the income of the owner of entertaining service and/or the fee for the author (artist) includes:  
Definitions of the general objective index from the available data on emotional state of audience on entertaining service and/or the given author (artist);  
Calculation of the income of the owner and/or the fee of the author (artist);  
Transfers of the income to the owner and/or the fee into account (or web-purse) of the author (artist).

37. System of claim 1, in which the subsystem of forecasting and planning of cost of the future entertaining services (works, products) includes items:  
Inquiry of consumers and gathering of estimations, indexes and profiles;  
Classifier of emotional-sensual profiles of consumers (on psychological types of persons; on cities, regions, countries and etc.; on age, professional, confessional, sexual and other attributes; by kinds of entertaining services and etc.);  
Storage of ratings of authors (artists) and entertaining services;  
Storage of expert psychological estimations and emotional-sensual profiles of scenarios (content) of the future entertaining services (works, products);  
Storage of emotional-sensual profiles of direct participants of process of realization of entertaining service, i.e. people rendering direct influence on character of perception of service (work, product) by the consumer, such as, the director, the artist, the executor the sportsman, character in game and etc;  
Comparison of emotional-sensual profiles of the declared scenarios with the appropriate cells of the classifier and definition of the future rating of media-product;  
Comparison of the declared rating with the cells of classifier by the choice of the cells appropriate to the rating with the necessary amount of consumers and composition by them of emotional-sensual profile of the future scenario (content) of service (work, product).

38. System of claim 1, in which the subsystem of the offer of new services (works, products) to the consumer includes items:  
Inquiry of consumers with the purpose of gathering estimations, indexes and profiles;  
Storage of new services (works, products) with their emotional-sensual profiles;  
Choice services (products, products) appropriate to the given consumer;  
Offer to the consumer of new services (works, products) with an emotional feedback for reception of their estimation;  
Storage of preferences and refusals on each consumer.

39. System of claim 1, in which a subsystem “the direct media-channel between the artist and the consumer in real time” includes items:  
Gathering of applications of consumers on performance of these or those media-products;  
Composition of timetable of media-concert with the indication of its key parameters, for example, time of the beginning and termination, a sequence of performance, the content as names of media-products;  
Count of wishes of consumers and the artists in accordance with the timetable content;  
Count of psychological features of the audience;  
Account (or web-purse) of the artist;  
Making a purse from audience, for example, by preliminary “freezing” of some stipulated sum on the account of the consumer before which “defreezing” and final payment is made after the termination of media-concert in view of value of pleasure received by the consumer;  
Calculation and payment of cost of services of the media-organizer, for example, provider;

Processing of the current emotional state of consumers and giving to the artist of the total diagram of emotional state of audience change, including various attributes of approval or disapproval by audience of the current performance, for example, "applause", "encore!", "bravo!", "bouquets of flowers", "whistle", "stamping by legs", "rotten eggs" and etc.;

Changes of the content of timetable by the artist depending on the current emotional state of the audience;

Changes of the scenario in real time mode with giving of changes to the artist by the way which is imperceptible for audience, for example, by using headphones, video-projectors, prompters, switching on beforehand prepared identical artist (real or virtual), using the records previously made and etc.

40. System of claim 1, in which the subsystem of revealing and forecasting of the nearest requirements of the user includes items:

Fixing of current ESP;

Fixing of physical state, for example, user lies, sits, goes and etc.;

Fixing of time of the day;

Fixing of kind and character of consumed media content;

Fixing of said characteristic words;

Analysis of previous items and results comparison with the typical displays of the user in life recorded earlier;

Giving of signal to the user about coming soon need.

41. System of claim 1, in which the subsystem of control of the speed and content of transmitted media-product includes items:

Fixing current ESP;

Cuttings superfluous media constructs out;

Library of inserted media constructs;

Insert of additional media constructs;

Manual control of cutting out operations, insertion and repetition of media constructs.

### *Description*

#### FIELD OF THE INVENTION

The given invention concerns a method and system of interaction between users and global-communication network.

#### **BACKGROUND OF THE INVENTION**

Media today is one of the important spheres in life of people around the world. All media production (printing, photo, radio, cinema, TV, video, multimedia computer systems, Internet) is possible to divide into two parts conditionally: informational and entertaining. Informational media-products influence, basically, on consciousness, intelligence, and entertaining media-products influence on emotion and feelings.

Consumption by users of media-entertaining products (music, movies, books, games) has an overall objective the pleasure receptions (positive emotions). This consumption is based on the principle of the greatest pleasure/benefit or, otherwise, an identical level of pleasure at the least level of resistance (i.e. searching of the maximal physical and psychological comfort). For realization of this principle various methods and systems of definition of user's emotional state and correction of the contents consumed media are invented.

In the patent 7,698,238 the system of definition of user's emotional state during consumption of the multimedia contents by him and its changes according to the certain user's emotional state is offered.

In the patent 7,610,255 the method and system of definition of emotional code of the user and searching in the network of the multimedia contents appropriate to this code and also people with the similar code is described.

In the application 20100107075 personal "agent" which constantly traces an emotional state of the user and helps to choose appropriate content to this state.

In the patent 7,543,330 the situation where during communication (computer, phone, online game and etc.) one or both partners have an opportunity to define the emotional state of other subscriber (by voice, from sensors and etc.) and according to it to assume any measures for reception of own benefit is described. It is invasion of privacy and malusage are possible here. For realization of the user's control above the captured emotional data it is offered to use special firewall, which forbids the unauthorized access.

In the application 20100205129 it is offered to define the mood of the user and on the basis of it to control the network and services.

Deeper understanding of process of media consumption according to the emotional state of the user and designing more adapted system of interaction to the person with media-communication network is necessary.

## SUMMARY OF THE INVENTION

Interaction of the user with global media-communication network is based on a feedback in real time mode and therefore does not include action of the consumer on estimation of the current media-product or on change of played media-product by another one. The system estimates the emotional state of the user and automatically makes change of media-products.

For remote definition of emotional state there is a sensor of emotional state of the user which is combined, for example, with the media-device.

The subsystem of choice of media-products chooses products which maximize the value of pleasure experienced by user. The choice is carried out from all media-products available at present in the given media-system or in any other media-system. The choice is carried out by optimization of combination of media-products from different categories of media, such as, music, video, text and etc.

Firstly the testing of emotional state/mood is carried out, and then media-product is chosen. The choice can be made also in view of character of forthcoming occupation of the person. Testing is carried out by presentation to the user a sequence of media-products from the subsystem of storage chosen preferences or by presentation of new media-products. And as a new media-products the advertising clips of the goods and services can be showed, for example.

The subsystem of storage of chosen preferences systematizes and generalizes the preferences of the user and composes his emotional-sensual profile (ESP). Thus ESP of the user is the key-identifier of the owner, for example, owner of the personal mobile media-device.

The subsystem of fixing and storage of sharp change of emotional state has the program of testing of the reasons on which the person experiences the current emotional state. For example, the media-device fixes the person, communication with which was unpleasant and at the following contact the system warns and offers to accept/refuse to contact.

The subsystem of correction emotional state has the program of automatic choice of media-products from the subsystem of storage of chosen preferences. Thus the subsystem of correction of emotional state has the program-adviser on methods of correction of the current emotional state. Also there is a set of programs for achievement of the given emotional state before the coming of the certain moment in the current human life, such as, public speech, funeral, congratulation, party, meeting and etc.

The subsystem of seeking of other users with relative ESP in media-communication network has the program of presentation ESP of the user in automatic search engines. Also there is a program of communication with users with relatives ESP and their association by "virtual villages" on a principle of full emotional-sensual compatibility. Thus the "virtual village" has common for all members a set of media-products. This set of media-products is updated by periodic testing preferences of separate members of the "virtual village".

The known fact: the person would like to communicate with the certain people only. The person wants to experience the certain emotions, and the nature has ordered so, that joint experience with other people of identical emotions repeatedly strengthens pleasantly excitant effect. People aspire to do many things together. Together to have fun, eat, to go on football and etc. It is much more interesting to experience pleasant emotions together. It is impressed more strongly (behaviour on the football, known phenomenon of crowd). I.e. each person, let unconsciously, aspires to seek the "same feelings person" for joint experience of desired feelings.

Therefore members of "virtual village" have a possibility of simultaneous expression of feelings in virtual space at simultaneous listening/viewing of products, real events and discussions.

However the user not always has "necessary" mood and emotion, therefore the subsystem of formation/synthesis of the image of the user's face is intended for creation the image under the given emotion for presentation to the current interlocutor by using video communication. Thus formation/synthesis of the user's face is carried out from former records of face's expressions, ordered on ascending sort of degree of emotional state.

Hedonistic motives of the human activity are known, according to which activity submits to a principle of "maximization of positive and minimization of negative emotions", i.e. the activity is directed on achievement of pleasure, enjoyment experiences and on avoidance of suffering experiences. I.e. in this case emotions also are motives of activity. Sometimes they attach to emotions crucial importance; more often emotions are included in number of so-called "motivational variables" side by side with other factors.

But the interaction with the virtual world, for example, taking delight in duing entertainment cannot be infinite. The person begins with repeatedly increased energy aspires to what he did not suffice and satiated with that he had in a plenty. It is feeling of satiation. The system should switch the person to other occupations or recommend to rest.

The basic psychical states of the person are known: 1) cheerfulness, 2) euphoria, 3) tiredness, 4) apathy, 5) depression, 6) alienation, 7) loss of feeling of reality. A purpose of media-system will be transfer of psychical state from 3-7 to 1-2. If the psychical state in any way "is not transferred" or "is not transferred any more" then the state 3-7 should be transferred in rest (sleep, autogenous training or meditation) with the purpose of renewal of forces, and only after that to transfer in state 1-2.

Thus the processes of excitation in brain are periodically changed by processes of braking (rest). Therefore there is a subsystem of definition of the degree of emotional

satiation of the user, i.e. coming the phase of braking of brain activity and then the subsystem switches the user to other kind of activity or rest.

Such system of tracing of emotional state has also a subsystem of formation and storage of usual day of the user which makes records for storage and/or for descendants, which are separate fragments of life, for example, what he ate, with whom communicated, what viewed and listened, read and etc.

All people different, therefore the subsystem of definition and storage of ESP has the program for adaptation of subsystem to psycho-physiological features of the user which makes definition of the neutral level of emotional state by using physiological parameters of organism and definition of range of parameters of emotional state.

Media-products are created by authors, and they are consumed by users. In exchange for the pleasure received by users (consumers) the author receives a payment. The influence is higher (pleasure, media effects) on consumers; the author should receive the higher payment. And on the contrary, the less influence (media effects), the lower payment the author should receive.

Except for authors and consumers there is a intermediary-organizer who take part in media-process, for example, a label, a television company, a publishing house, provider, a game portal and etc.

Any media-product represents the sum of media constructs (musical phrases, texts, video images and etc.). Different media constructs have a different influence on the consumer. Therefore the user during the consumption of media-product experiences different emotions and feelings. Sometimes the emotional state changes sharply, sometimes slowly. Thus during perception of media-product the user experiences a various level of emotional state. This level on a time scale can be wavy, peak-shaped and etc.

The emotional state also can low below "zero" (neutral) level i.e. to pass into state of negative emotions. If to summarize all fluctuations of the user's emotional state during perception by him one of media-product then it is possible to receive some estimation of this product by the given user.

The estimation of user's emotional state and estimation of media-product have importance for all three participants of media-process (author/artist, consumer and intermediary-organizer).

The system allows organizing new services which are not present today in existing networks. For example, members of "virtual village" communicate with authors or media owners without intermediaries, for example, with artist and organize virtual joint consumption of media-product, for example, arrange the concert. Thus the consumers of media products pay to the author/owner a fee proportionally of received pleasure. For realization of such services there is a subsystem of data processing about emotional-sensual features of the "virtual village".

If to receive estimations of emotional state of the user and an estimation of media-product for some set of products one of author we shall receive the general estimation of this author by the given user.

If to receive such estimations for some set of authors we shall receive exact representation about the area of preferences of the user in media. It will enable to compose his ESP.

If to trace how the estimation of the user of different authors in various media-systems in the course of time changes then we shall receive representation about a trajectory of displacement of preferences of the user. It will enable to foresee (predict) which media-products user likes in the greatest degree.

The sum of emotional estimations of the masses of consumers ("virtual village", concert hall, stadium, region, country, and world) at any moment of time or for some period of time, expressed as some index, is "an index of popularity of the author (artist)". This



index can be determined automatically; in this case it will be objective and will not depend on any manipulations. It also can serve a basis for delivery prize to the author (similar to former “gold” and “platinum” recording discs), awarding, awarding national (or other) rank, immortalization the name and etc.

Besides, the emotional estimation of consumers can serve as objective basis for the payment for author (artist). Payment should be proportional to the pleasure received by consumers. Therefore payment (or final payment at advance payment) is made after media-product will be perceived by the consumer. Payment can be organized without intermediaries; directly between the author and consumers.

The emotional estimation of some experts (fans, professionals) can serve as criterion for selection, correction and development of entry-level author (artist).

The subsystem of data processing about emotional-sensual features of “virtual village” includes items: a) calculation of index of preference of the author (artist); b) calculation of index of preference of the given type of service (kind of show, genre of movie, kind of sports, musical style and etc.); c) the storage of estimations of cost of entertaining services and indexes of preferences of authors, artists, types of entertaining services and etc.; d) composition of the general emotional-sensual profile; e) giving of estimations, indexes and profiles on inquiry of subsystem of forecasting and planning; f) the summator of pleasure of consumers simultaneously consuming entertaining service on each author (artist) and on each type of entertaining services; g) calculation of rating of authors (artist) and entertaining services.

The subsystem for calculation of rating of authors (artist) and entertaining services is based on definition of the general objective parameter from the available data on emotional state of the audience, for example, as product of amount of taking part consumers multiplied by average estimation or index of authors (artists).

Subsystem for calculation of the income of the owner of entertaining service and/or the fee for the author (artist) includes items: a) definitions of the general objective parameter from the available data on emotional state of the audience on entertaining service and/or the given author (artist); b) calculation the income of the owner and/or the fee for the author (artist); c) transfers of the income to the owner and/or the fee into account (or web-purse) of the author (artist).

The organizer of media-process receives an opportunity effectively to control by own media-channel, because:

- He will know precisely indexes of authors (artists) and dynamics of its change;
- He will know precisely a spectrum of preferences of users of his channel;
- He continuously can trace the current rating of media channel or media product and analyze their changes during time;
- He can plan the activity for the future precisely.

For example, the organization of a system for the content controlling of the future media-flow is possible.

Technology of controlling of the future content of the media-channel includes:

- Composition of ESP of the user by using current contents and by vital situations;
- Sending ESP on the central server in accordance with the consent or without the consent (anonymously) of the user;
- Classification ESP on the server on categories; composition ESP of the city, region or country.

On the basis of it the forecasting of the future rating of media-product is possible by comparison ESP of the scenario (content) and the appropriate categories on the central server. Objective choice of the director of the future movie by results of comparison his ESP with required one for movie.

Work of “Automatic Hollywood” can be following:

- The rating of the future movie (for example, 80 million of spectators) is given;

- Sorting of ESP by using database of spectators is carried out so that the sum of the chosen cells will equal for the given figure;
- ESP of future film is carried out;
- The scenario is written;
- The director, actors is chosen;
- And etc.

Process of choice of the author (actor) by the user is accidental today. Such fact frequently creates a phenomenon of false (dying away) "stars". Process of appearance of false "stars" has cumulative character because it is added of preferences of masses of users, which, not having objective estimations, first time choose the authors (artists) most popular at present. Therefore popularity of such author (artist) can remain long time high (or even grow) in spite of the fact that near to him there can be more talented author (artist).

The subsystem of forecasting and planning of cost of the future entertaining services (works, products) includes items: a) inquiry of consumers and gathering of estimations, indexes and profiles; b) qualifier of ESP consumers (on psychological types of persons; on cities, regions, countries and etc.; on age, professional, confessional, sexual and other attributes; by kinds of entertaining services and etc.); c) storage of ratings of authors (artists) and entertaining services; d) storage of expert psychological estimations and emotional-sensual profiles of scenarios (contents) of the future entertaining services (works, products); e) the storage of emotional-sensual profiles of direct participants of process of realization of entertaining service, i.e. people rendering direct influence on character of perception of service (product, a product) by the consumer, such as, the director, the artist, executor, sportsman, a type in game and etc.; f) comparisons ESP of the declared scenarios with appropriate cells of the classifier and definition of the future rating of media-product; g) comparisons of the declared rating with cells of classifier by choice of the cells appropriate to rating with the necessary sum of consumers and composition on them ESP of the future scenario (contents) of service (work, product).

The subsystem of the offer to the consumer of new services (works, products) includes items: a) inquiry of consumers with the purpose of gathering of estimations, indexes and profiles; b) the storage of new services (works, products) with their ESP; c) choice of appropriate to the given consumer services (works, products); d) offers to the consumer of new services (works, products) with emotional feedback for the reception of their estimation; e) storage of preferences and refusals on each consumer.

The subsystem "the direct media-channel between the artist and consumer in real time mode" includes items: a) gathering of applications of consumers on performance of these or those media-products; b) composition of timetable of media-concert with the indication of its key parameters, for example, time of the beginning and termination, sequence of performance, content as names of media-products; c) account of wishes of consumers and the artist on the timetable content; d) account of psychological features of audience; e) account (or web-purse) of the artist; f) making a purse from audience, for example, by preliminary "freezing" some stipulated before the sum on the account of the consumer, "defreezing" of which and final payment is made after the termination of media-concert in view of value of the pleasure received by the consumer; g) calculation and payment of cost of services of the media-organizer, for example, provider; h) Processing of the current emotional state of consumers and giving to the artist of the total diagram of emotional state of audience change, including various attributes of approval or disapproval by audience of the current performance, for example, "applause", "encore!", "bravo!", "bouquets of flowers", "whistle", "stamping by legs", "rotten eggs" and etc.; i) Changes of the content of timetable by the artist depending on the current emotional state of the audience; j) Changes of the scenario in real time

mode with giving of changes to the artist by the way which is imperceptible for audience, for example, by using headphones, video-projectors, prompters, switching on beforehand prepared identical artist (real or virtual), using the records previously made and etc.

In case of realization of concert (any media-entertaining action) in conditions of real hall (stadium and etc.) the action can be organized as follows.

The concert is specific service on creation the pleasure at the spectator. The pleasure is the sum of experienced by the person positive emotions during the concert. Organizers of concert by advertising and announcements make a proposal for potential buyers of this specific service to buy it. Thus the price of the ticket usually depends on the place of spectator in the hall, on convenience of seats, on quality of transmitted sound and etc. Such prices are fixed and do not depend in any way on value and quality of the service received by the spectator. Organizers of concert make fixed price of tickets at will, being guided on certain "average spectator". But each person

But each person is individual, his psychological state is changeable; behaviour (creative mood) of artist on a stage difficultly predictably. All this facts makes absolutely impossible exact definition of value and quality of rendered specific service previously. Such value and quality can be defined only at the end of concert, as the sum of the pleasure received by the spectator. Existing methods of definition (for example, individual inquiry of spectators on the exit after concert) are biased, take away a lot of time and do not solve the problem of exact correlation of the ticket price and quality of the received service.

As entertainment any collective or individual actions having the purpose of achievement of pleasure at participants can be considered.

Use of information about the pleasure received by participants can be used for other purposes: for example, for definition of winners in contests, festivals, competitions etc.

During all paid public action the measure of emotional state of participants is carried out and the general and individual level on various parameters is calculated: average level, value of peak, duration of peak, quantity of peaks and etc.

Definition of ESP, tracing of viewed in given moment video clips and the linguistic analysis of the current conversation of the user allow revealing and predicting the nearest, but still unconscious needs of the user.

This fact is described by the following.

The human is the biochemical machine in which there are physiological and nervous processes. If processes are balanced and there is no deficit of resources (feeding these processes) then there is not imbalance, there is not present displacement of processes in the negative side, there is no need to result processes in a condition of dynamic balance. As soon as imbalance of something comes (deficit), starts increasing the negative parameter and nervous receptors start to catch this increase.

The signal grows, exceeds noise level and is caught (fixed) by a subcortex and it is the first threshold of sensitivity. The subcortex has influence on a cortex, but mediated, not obvious, not direct. Some weak, indistinct signal moves into cortex. This signal causes unconscious feeling of alarm and anxiety. The signal grows further and reaches a threshold of awareness (the second threshold of sensitivity) when the need as precise requirement in the verbal form is formulated. Only after this the person realizes, what it is necessary to him and achieves satisfaction of need.

Till now all nonmaterial and trade tried to influence on brain which has realized own needs. Here all solutions are found also and the further development is impossible. The following step of development is a zone between the first and second threshold of sensitivity because the signal which not reached the level of the first threshold of sensitivity is in a noise zone and it basically is not distinguished. The solution of problem of tracing of need between the first and second threshold of sensitivity consists in the

following. The special program in computer traces all preferences of the person, such as, what he writes, watch, force of pressing keys, timbre of voice, emotional state, mimicry and etc. These data transmits on the analysis into expert system where they are compared to psycho-physiological displays (parameters) which were received earlier at testing the user. On an output the most probable need which will be realized by the user in the near future is formulated.

The subsystem of revealing and forecasting of the nearest needs of the user includes items: a) fixing of current ESP; b) fixing of physical state, for example, user lies, sits, goes and etc.; c) fixings of time of the day; d) fixings of kind and character of consumed media content; e) fixing of said characteristic words; f) Analysis of previous items and results comparison with the typical displays of the user in life recorded earlier; g) giving of signal to the user about coming soon requirement.

In system also there is a subsystem of control of the speed and content of transmitted media-product includes items.

Different people perceive all differently, with different speed of perception and understanding. The person has desire to watch movie up to the end, but frequently person does not like movie (but it would be desirable to learn the end of story). It is necessary to reduce time of movie watching. Or on the contrary if the person likes movie then to stretch the pleasure. The same episode depending on interest of the spectator can be shown unwrapped, and it is possible compressed on the basis of emotional feedback. Methods of change of speed depending on emotional state include:

- Transmission one of several variants recorded before movie;
- Cutting or addition of the frames.

The same is with music: removal of emotional-failed pieces of the text and music, change of arrangement, structure of tools and etc.

The subsystem of control of the speed and content of transmitted media-product includes items: a) fixing current ESP; b) cuttings superfluous media constructs out; c) library of inserted media constructs; d) insert of additional media constructs; e) manual control of cutting out operations, insertion and repetition of media constructs.

People with similar ESP can be called as "same feelings people" (as analogy with "the same thinking people").

The same feeling persons form "virtual village". Such villages will be dynamical because the emotional preferences change; villages will be appear and disappear, flow into other formations.

The same feeling persons are people with close biosocial instincts. At rough gradation there is no more than 30 variety (in accordance with socionics 32 types of people are distinguished). If to take into account excellent tastes of especially advanced persons such types can be, probably, some thousand. But there are billions people on the Earth. That means, at an easy opportunity of "same feeling person" detection in the virtual world, many thousands symbioses will be created on the basis of full emotional compatibility.

Appearance of these symbioses will be similar to association unicellular into multicellular. The primitive network of "monocelled" sites of today's internet will turn into more complex organism from automatically created "virtual villages" of the same feeling people.

What is the benefit here for the users? Any organized system is steadier, is viable, adapts to changes of external conditions more easy.

Let us list the basic benefits for the user:

- a) The uniform adapted market of workplaces and labor force;
- b) Uniform constantly updated playlist of media-entertainments for all participants;
- c) The effect of repeated strengthening of joint perception works;
- d) There is an opportunity of full self-realization of the person;

The explanatory for d item are. The biosocial complex (instinct) of the human is formed from combination of various qualities and properties (caused genetically and acquired during education); this complex is one on all life (life brings only small correctives). The main aspiration of the human in life is self-realization, i.e. desire to follow by biosocial instinct, put by nature. If the person has realized self-realization then he feels like happy. With the help of "virtual village" the person will be occupied with such activity which will allow to realize him the innate biosocial needs and own social instinct.

e) An integrated information flow completely adapted to the given category; that means the information is completely acquired;

The explanatory for e item are. From the early childhood and during all life, the person perceives only a part of information. That part which helps him to reach self-realization makes very strong and pleasant impression on the person and is well remembered. That part of the information which is useless or harmful, from the point of view of self-realization, is not noticed by the person and not remembered. The person is simply fenced off the unnecessary and inconvenient information. Psychologists open a set of principals with which help the person fenced off the inconvenient and unpleasant information. Such principals are, for example, denying, displacement, projection, identification, rationalization, replacement etc. Thus the person can protect both consciously and unconsciously. Thus, from the early childhood the person as sponge absorbs in himself the information, but only that part which helps him to reach self-realization. In the "virtual village" there will be only such information.

f) Search of the partner for creation of family by the principle of full emotional compatibility (in the "my" village) or by the complementarity principle (in an "alien" village) is facilitated;

g) The problem of a suicide disappeared because it will be enough the fact that the self-murderer get in the village, where he will be understood and inhabitant will help him at the same time;

h) Only the "same feeling people", thoroughly knowing features of own character, can create any financial structures with the highest degree confidentiality and securities.

The world will divide on spheres by emotional properties: each sphere has own style, games, habits, entertainments, universities, label of cars and etc.

In the real world the people will be mixed, but in virtual world everyone will be in the own village.

Further it will possible testing not only emotional, but also intellectual, physical and etc. There will be a stratification of mankind on groups, layers and societies.

Let's consider other possible applications of system.

Let's imagine a school lesson with ESP definition. The teacher tells teaching material of the lesson using the thought over plan. It is always a mix of the information, rules, examples and conclusions. By way of lesson the purpose of lesson is determined: pupils should acquire something main thing. To acquire means to understand and remember. The person remembers it well only if, at present, it is emotionally painted, positively or negatively. The lesson is created in such manner that the information-explanation (i.e. logic perception) is carried out in emotional-neutral state of pupils, but storing carried out in emotional-painted state. Such state is created by special psychological receptions, for example, at the story telling about rules of self-defense from an attack of hooligans; materials of a real criminal case with analysis of mistakes of the victim, with showing of consequences and etc., and, at the moment of the greatest peak of negative ESP (pupils experiences a horror); the teacher tell them a short capacious rule of behaviour that it has not taken place with pupils. For creation of necessary ESP the teacher, for example, refers (shows video record) on the statement of the person most popular and dear among pupils (such as singer, sportsman, hero of a cartoon and etc.).

It is important to define ESP of employees, to create collective so that there was no incompatibility and disputed situations. It also is applicable to sportsmen, military, rescuers, doctors and etc. I.e. the system can become an automatic manager on the personnel (or his assistant). It is possible to trace how the person perceives any pictures on a wall (test pictures), musical or video fragments (unostentatiously appearing), including case on real work meeting with the director and etc.

In the plane the person can listen to the music which only is pleasant for him.

There is personal guide on ESP basis to take into account interests of each visitor and to transmit more detailed or less detailed story in a museum, at an exhibition and etc.

The automatic adviser in shop takes into account ESP of the buyer and offers to buy the goods at the moment of peak of his emotional state. Or he can include recommendations of emotionally significant person for the user (for example friend, relatives, outstanding persons and etc.). If the emotional condition is lowed, then discounts in the price offers at the same time.

The family is the special union of the "same feeling people". Frequently there is a desire to connect to joint sensation (for example, sometimes much more interesting to watch for the reaction of the child on new animated cartoon, than myself to watch movie).

When politician speaks on meeting and tries to trace mood of crowd then he does not have means of influence on people, except for his speech. He should, as it was always to speak and convince. Appearance of a new element (ESP sensor of crowd) will allow tracing total mood of crowd and to correlate it to phrases of the orator, giving him a signal and advice.

Exact detecting of emotional state of the user is possible only by means of the appropriate hardware. In the greatest degree for the purposes of the given invention a Vibralmage technology can be applied [21-24].

This technology is based on V.A. Minkin's opening of a new phenomenon in the human psychophysiology: full interrelation psychoemotional state with micromovings of the centre of gravity of the person, in particular, of head. Micromovements of points of the person's face are continuously traced by videocamera (built in any technical device, external and etc.) and with the help of the program is analyzed. The program defines psychoemotional state of the person at each given moment of time.

Vibroimage for psychology is similar to the invention of microscope for biology. At a level of micromovements the new world of emotions opens which can be defined automatically with the help of technical means. Vibroimage is a nanopsychology in which displacement of the centre of gravity of the person in the balance condition on some nanometers reflects display of consciousness and subconsciousness.

The technical task of user's psychophysiological state concerns to biometrics. Biometrics unites physics, mathematics, medicine and psychology for measurement of biological and/or behavioural characteristics of the person with the purpose of identification of the person's psychophysiological state.

On the basis of this opening the system of remote contactless scanning and identification of the person's psychophysiological state is created.

Ability to live of the human and any living object is associated to a set of periodic processes (breath, pulse, work of sensitive systems), taking place in organism. Intensity of physiological processes is associated to organism's state. When the person is quiet and has a rest, frequency of cardiac beat is minimal. When the person is excited, frequency of work of heart rises and breath becomes frequent. Frequency of vibrations of the person reflects power of his movement that means mental condition, emotions and health also.

For the characteristic of vibroimage four functionally independent groups of the parameters describing various properties such as amplitude, frequency, symmetry and processing of vibroimage were chosen.

Efficiency of psychophysiological state definition was confirmed with comparative tests and measurement of parameters by known methods (EEG - electroencephalogram, GSR - galvanic skin response, ECG - electrocardiogram) and psychological testings (Buss-Durkey inventory, Hend's test, Lusher's test).

In the program there is function of definition of neutral ("zero") emotional state. Such definition takes (default) 10 seconds.

The vibroimage technology allows controlling user's state in real time mode i.e. to fix change of vibroimage in the same share of second when the state of the person has changed. It can be defined with the help of "fast" parameters of vibroimage, for example, the parameters determined on difference of two near frames. Thus, certainly, it is necessary to take into account a possibility of influence of casual errors on the received result. The increase of time of accumulation of difference between two near frames allows increasing accuracy and reliability of measurements, but complicates fixing of fast flowing processes. Results of researches of human vibroimage have shown, that time of accumulation equal to about 10 seconds is optimum for definition of the person's state with the help of vibroimage technology.

On the screen of own monitor the user of system can watch the image, vibroimage and aura of objects to make record and processing of vibroimage parameters, define the emotional state of the person and level of health.

System of vibroimage makes automatic monitoring the level of emotions, and also carries out lie detection in real time mode.

System of vibroimage allows to analyze the videofiles (.avi) recorded previously and carry out the emotional control of the person in the video materials received from any source.

System of vibroimage analyzes and registers more than 20 parameters of vibroimage and offers the user to carry out the adjustment of system according to the own aims and define required psychophysiological parameters of the person.

Program of videoimage includes three independent program modules: program for work with living video (Vibralmage), program for viewing recorded videos and a log files (LogViewer), program for viewing and printing the archive of recorded vibroimages of patients (VIPrinter).

Program Vibralmage allows each user having computer and web camera carry out own personal or scientific psychophysiological researches.

The researcher working with system receives a unique opportunity of objective control of his psychophysiological state, relatives or patients with the help of standard hardware.

## BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other objects, features, and advantages of the invention will be apparent from the following more particular description of preferred embodiments of the invention, as illustrated in the accompanying drawings in which like reference characters refer to the same parts throughout the different views. The drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles of the invention.

Figure 1 shows the structure of system of interaction between users and global media-communication network.

Figure 2 shows the structure of "virtual village".

Figure 3 shows the structure of subsystem of data processing about emotional-sensual features of "virtual village".

Figure 4 shows the structure of subsystem for calculation of the income of the owner of entertaining service and/or fee for the author (artist).

Figure 5 shows the structure of subsystem of forecasting and planning of cost of the future entertaining services (works, products).

Figure 6 shows the structure of subsystem of new services (works, products) offer for the consumer.

Figure 7 shows the structure of subsystem "the direct media-channel the artist - the consumer in real time mode".

Figure 8 shows the structure of subsystem of revealing and forecasting of the nearest needs of the user.

Figure 9 shows the structure of subsystem of control of speed and content of transmitted media product.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Figure 1 shows the structure of system of interaction between users and global media-communication network. System 1 of interaction between users and global media-communication network includes: subsystem of storage and playback of media-products 2, subsystem of definition of emotional-sensual user's profile 3, subsystem of feedback between the user and subsystem of storage and playback of media-products in real time mode 4, subsystem of storage of chosen preferences 5, subsystem of fixing and storage of sharp changes of emotional state 6, subsystem of correction of emotional state 7, subsystem of seeking for other users with close emotional-sensual profile 8, subsystem of formation/synthesis of the image of user's face 9, subsystem of definition of a degree of emotional satiation of the user 10, subsystem of formation and storage of typical (usual) day of the user 11, subsystem of data processing about emotional-sensual features of a "virtual village" 12, subsystem for calculation of the rating of authors and entertaining services 13, subsystem for calculation of the income of the owner of entertaining service and/or fee payments to the author (artist) 14, subsystem of forecasting and planning of cost of the future entertaining services (works, products) 15, subsystem of the new services (works, products) offer for the consumer 16, subsystem "a direct media-channel between the artist and consumer in real time mode" 17, subsystem of revealing and forecasting of the nearest needs of the user 18, subsystem of control of the speed and content of transmitting media product 19.

Figure 2 shows the structure of "virtual village". "Virtual village" 20 includes: program of periodic testing preferences of separate members of the "virtual village" 21, program of simultaneous expression of feelings in virtual space at simultaneous listening/viewing of products, real events and discussions 22, program of communicate with authors or



media owners without intermediaries, for example, with artist and organize virtual joint consumption of media-product, for example, arrange the concert 23, common for all members the set of media products 24, program of payment to the author/owner the fee proportionally of received pleasure 25.

Figure 3 shows the structure of subsystem of data processing about emotional-sensual features of "virtual village". The subsystem of data processing about emotional-sensual features of "virtual village", calculation of index of preference of the author (artist) 12 includes: unit of calculation of index of preference of the author (artist) 26, unit of calculation of index of preference of the given type of service (kind of show, genre of movie, kind of sports, musical style and etc.) 27, storage of estimations of cost of entertaining services and indexes of preferences of authors, artists, types of entertaining services and etc. 28, unit of composition of the general emotional-sensual profile 29, unit of giving of estimations, indexes and profiles on inquiry of subsystem of forecasting and planning 30, summator of pleasure of consumers simultaneously consuming entertaining service on each author (artist) and on each type of entertaining services 31, unit of calculation of rating of authors (artist) and entertaining services 32.

Figure 4 shows the structure of subsystem for calculation of the income of the owner of entertaining service and/or fee for the author (artist). Subsystem for calculation of the income of the owner of entertaining service and/or fee for the author (artist) 14 includes: unit of definitions of the general objective index from the available data on emotional state of audience on entertaining service and/or the given author (artist) 33, unit of calculation of the income of the owner and/or the fee of the author (artist) 34, unit of transfers of the income to the owner and/or the fee into account (or web-purse) of the author (artist) 35.

Figure 5 shows the structure of subsystem of forecasting and planning of cost of the future entertaining services (works, products). Subsystem of forecasting and planning of cost of the future entertaining services (works, products) 15 includes: unit of inquiry of consumers and gathering of estimations, indexes and profiles 36, classifier of emotional-sensual profiles of consumers (on psychological types of persons; on cities, regions, countries and etc.; on age, professional, confessional, sexual and other attributes; by kinds of entertaining services and etc.) 37, storage of ratings of authors (artists) and entertaining services 38, storage of emotional-sensual profiles of direct participants of process of realization of entertaining service, i.e. people rendering direct influence on character of perception of service (work, product) by the consumer, such as, the director, the artist, the executor the sportsman, character in game and etc. 39, unit of nit of comparison of emotional-sensual profiles of the declared scenarios with the appropriate cells of the classifier and definition of the future rating of media-product 40, storage of expert psychological estimations and emotional-sensual profiles of scenarios (contents) of the future entertaining services (works, products) 41, unit of comparison of the declared rating with the cells of classifier by the choice of the cells appropriate to the rating with the necessary amount of consumers and composition by them of emotional-sensual profile of the future scenario (content) of service (work, product) 42.

Figure 6 shows the structure of subsystem of new services (works, products) offer for the consumer. The subsystem of new services (works, products) offer for the consumer 16 includes: unit of inquiry of consumers with the purpose of gathering estimations, indexes and profiles 43, storage of new services (works, products) with their emotional-sensual profiles 44, unit of choice services (products, products) appropriate to the given consumer 45, unit of offer to the consumer of new services (works, products) with an emotional feedback for reception of their estimation 46, storage of preferences and refusals on each consumer.

Figure 7 shows the structure of subsystem "the direct media-channel the artist - the consumer in real time mode".

Subsystem "the direct media-channel the artist - the consumer in real time mode" 17 includes: unit of gathering of applications of consumers on performance of these or those media-products 48, unit of composition of timetable of media-concert with the indication of its key parameters, for example, time of the beginning and termination, sequence of performance, the content as names of media-products 49, unit of count of wishes of consumers and the artists in accordance with the timetable content 50, Unit of count of psychological features of the audience 51, unit of account (or web-purse) of the artist 52, unit of making a purse from audience, for example, by preliminary "freezing" of some stipulated sum on the account of the consumer before which "defreezing" and final payment is made after the termination of media-concert in view of value of pleasure received by the consumer 53, unit of calculation and payment of cost of services of the media-organizer, for example, provider 54, unit of processing of the current emotional state of consumers and giving to the artist of the total diagram of emotional state of audience change, including various attributes of approval or disapproval by audience of the current performance, for example, "applause", "encore!", "bravo!", "bouquets of flowers", "whistle", "stamping by legs", "rotten eggs" and etc. 55, unit of changes of the content of timetable by the artist depending on the current emotional state of the audience 56, unit of changes of the scenario in real time mode with giving of changes to the artist by the way which is imperceptible for audience, for example, by using headphones, video-projectors, prompters, switching on beforehand prepared identical artist (real or virtual), using the records previously made and etc.

Figure 8 shows the structure of subsystem of revealing and forecasting of the nearest needs of the user. Subsystem of revealing and forecasting of the nearest needs of the user 18 includes: блок unit of fixing of current ESP 58, unit of fixing of physical state, for example, user lies, sits, goes and etc. 59, unit of fixing the time of the day 60, unit of fixing of kind and character of consumed media content 61, unit of fixing of said characteristic words 62, unit of analysis of previous items 58-62 and results comparison with the typical displays of the user in life recorded earlier 63, unit of giving of signal to the user about coming soon need 64.

Figure 9 shows the structure of subsystem of control of speed and content of transmitted media product. Subsystem of control of speed and content of transmitted media product 19 includes: unit of fixing current ESP 65, unit of cuttings superfluous media constructs out 66, library of inserted media constructs 67, unit of insert of additional media constructs 68, unit of manual control of cutting out operations, insertion and repetition of media constructs 69.

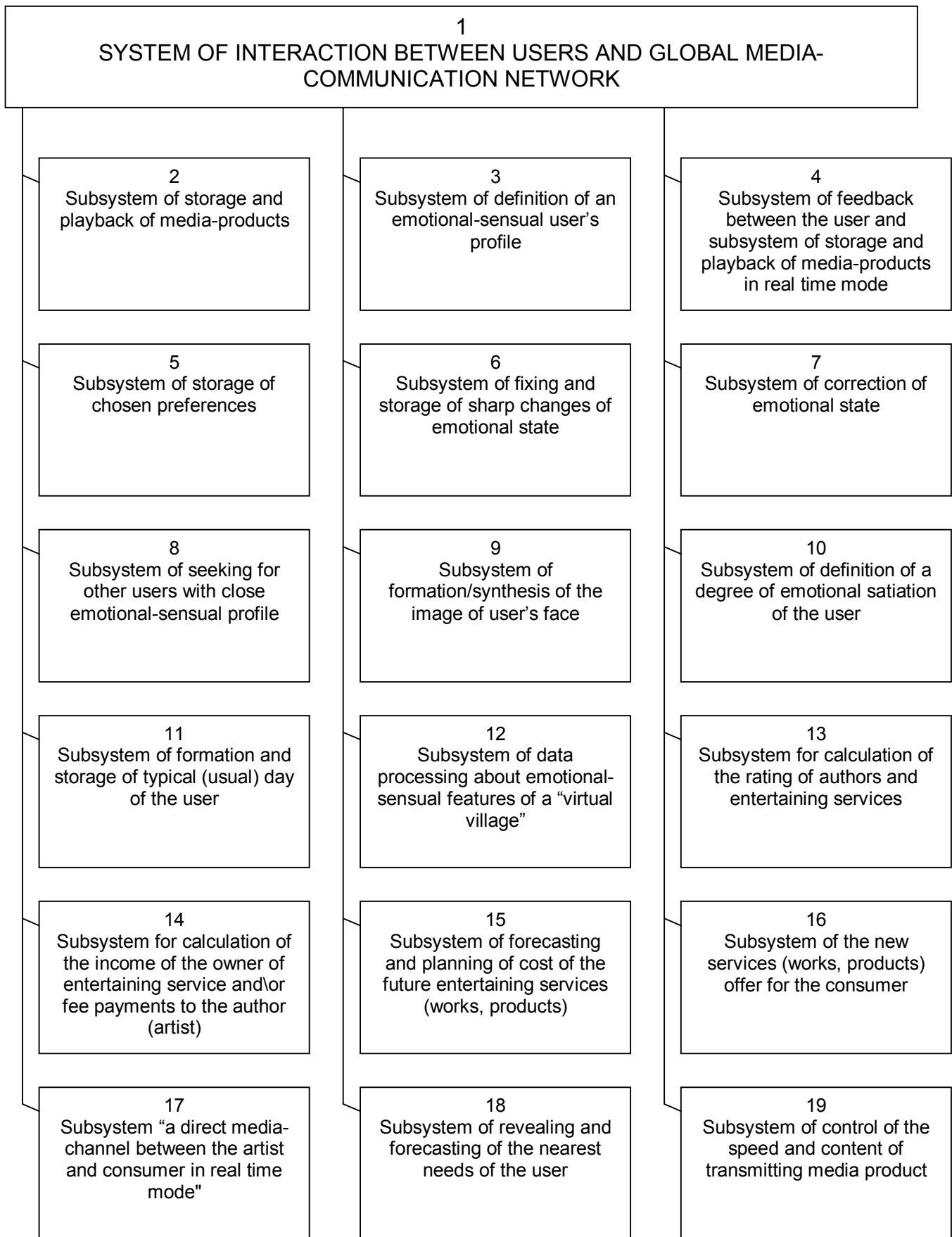


Fig 1

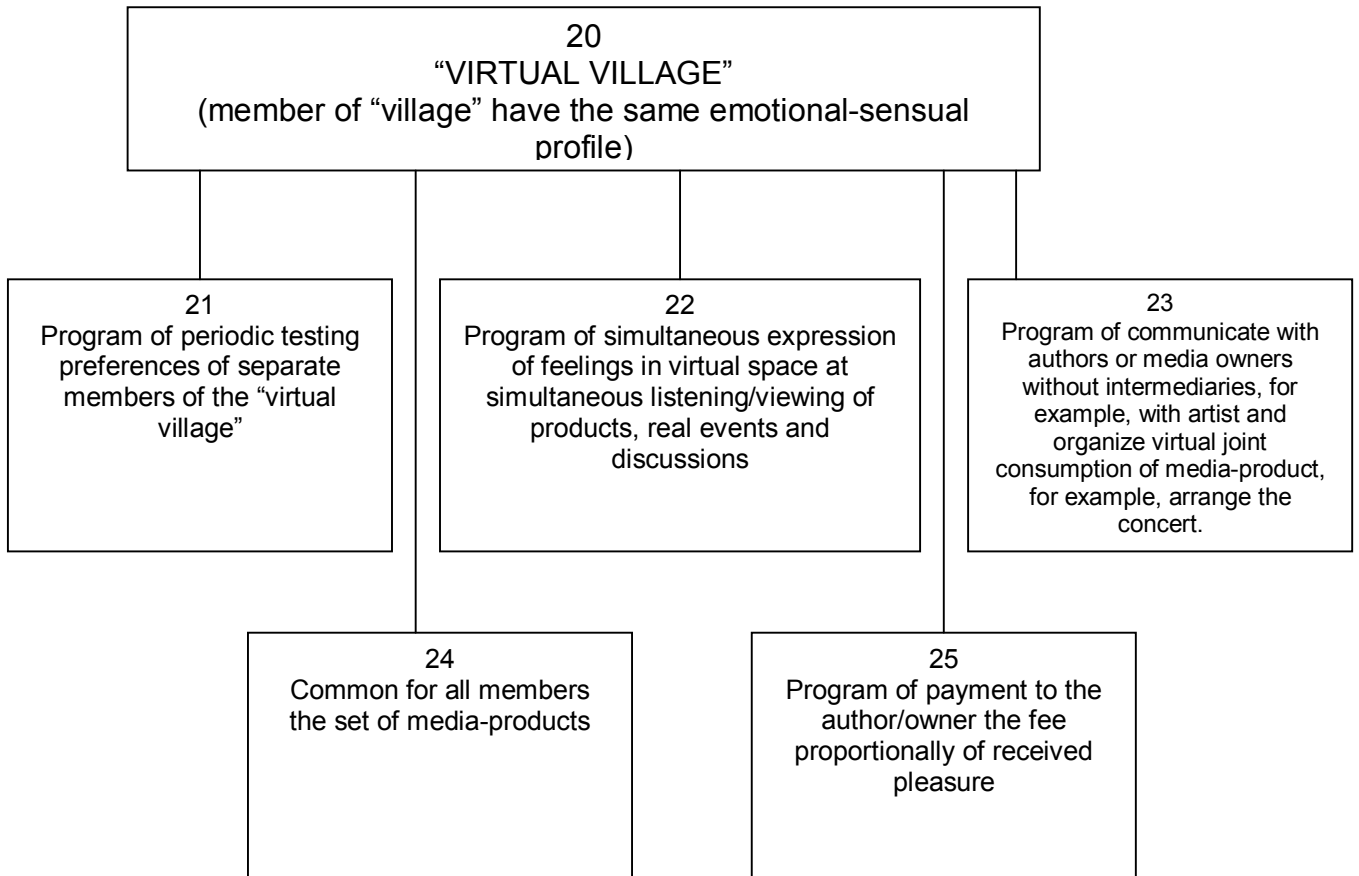


Fig 2

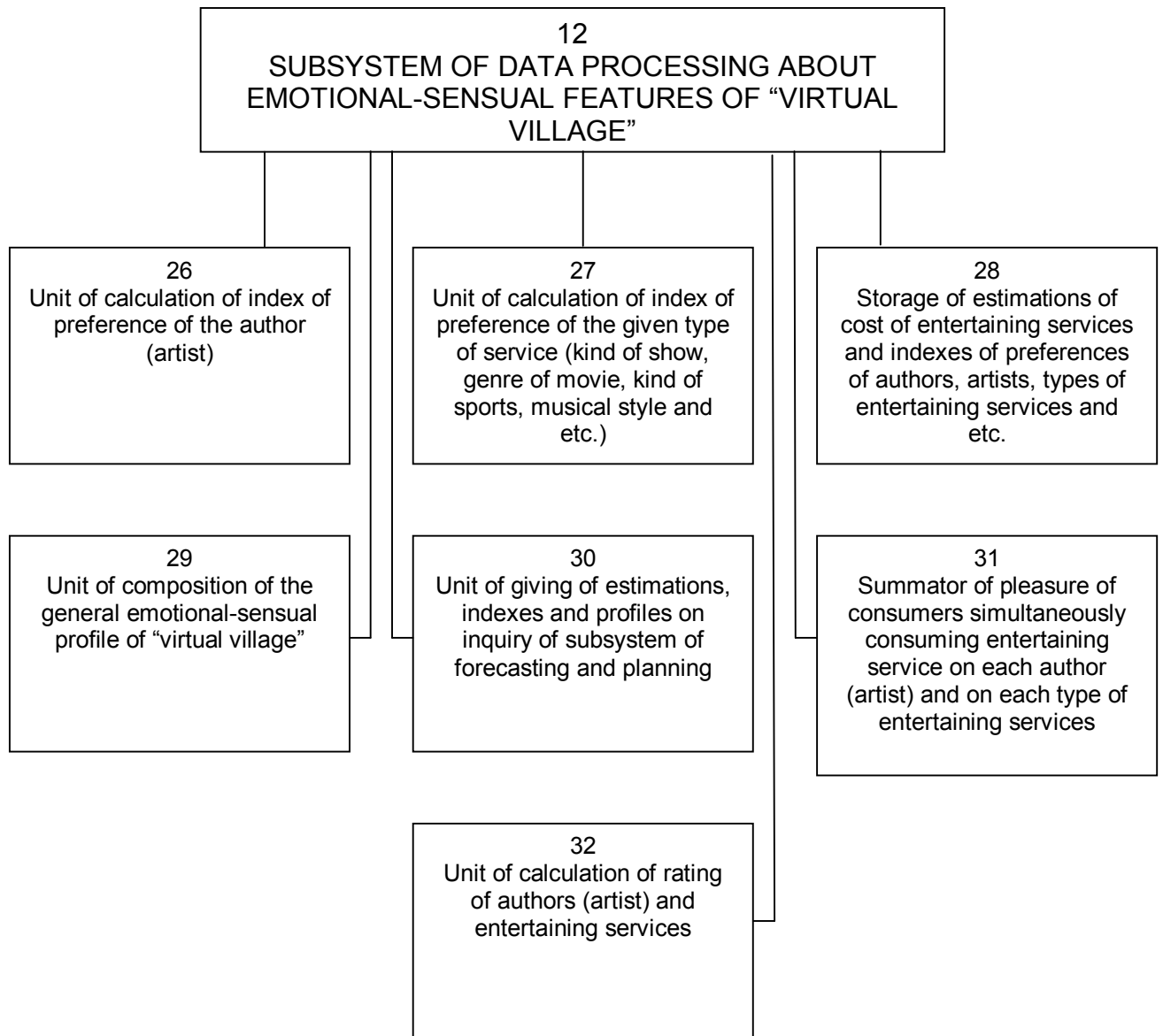


Fig. 3

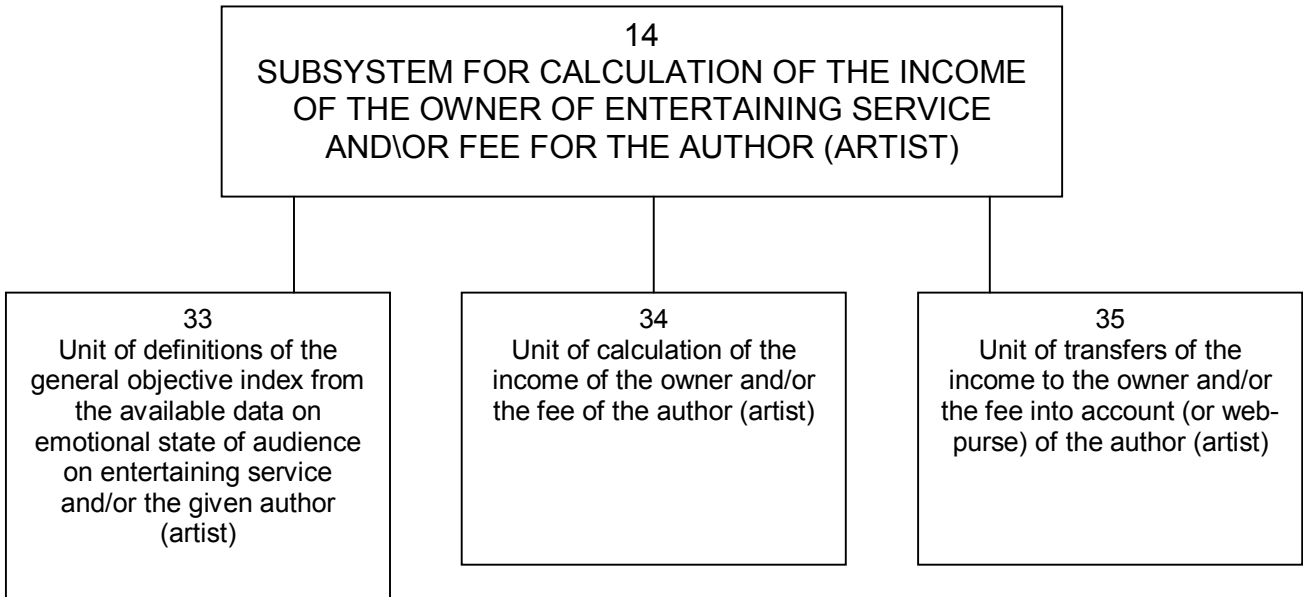


Fig. 4.

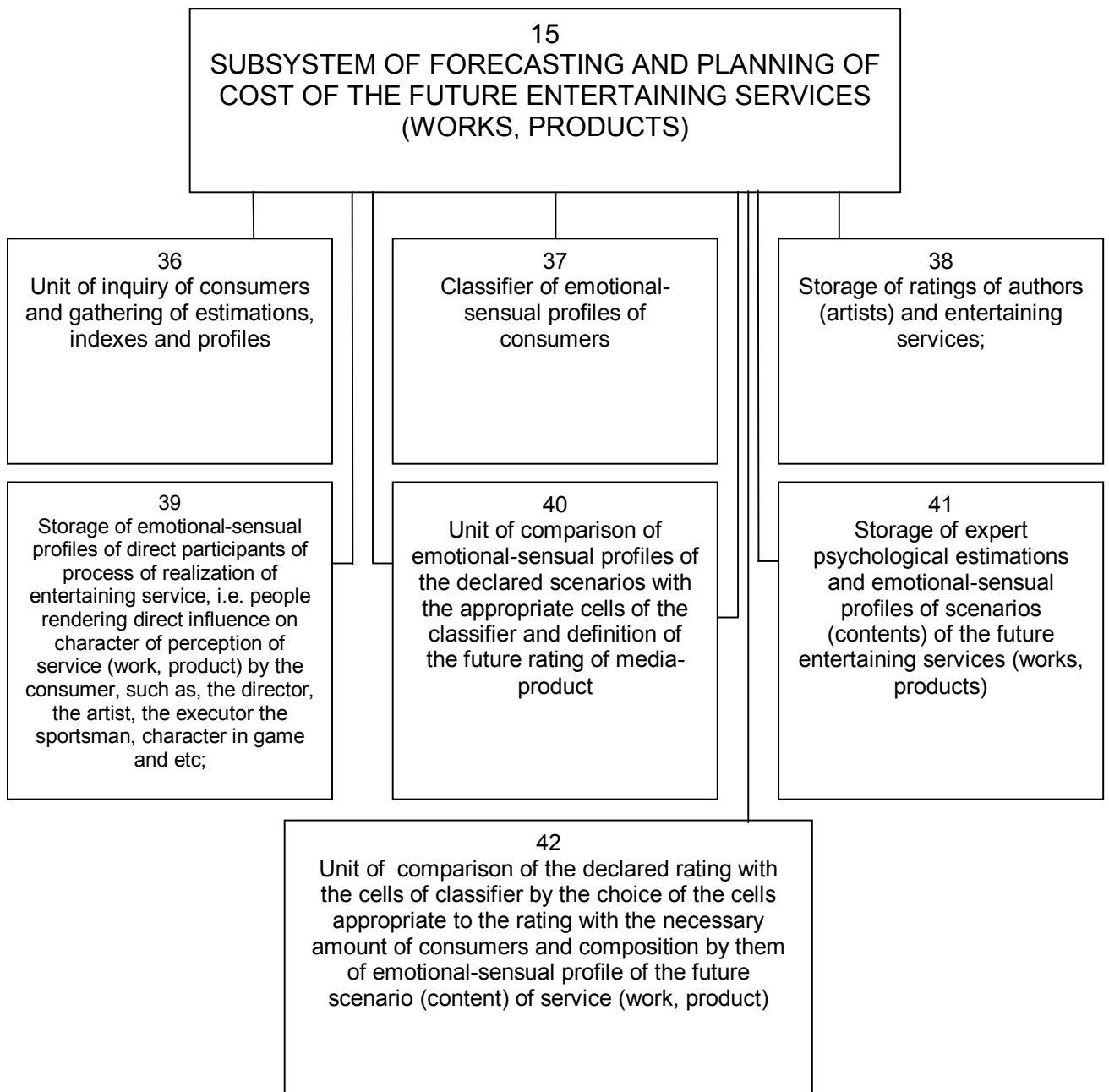


Fig. 5

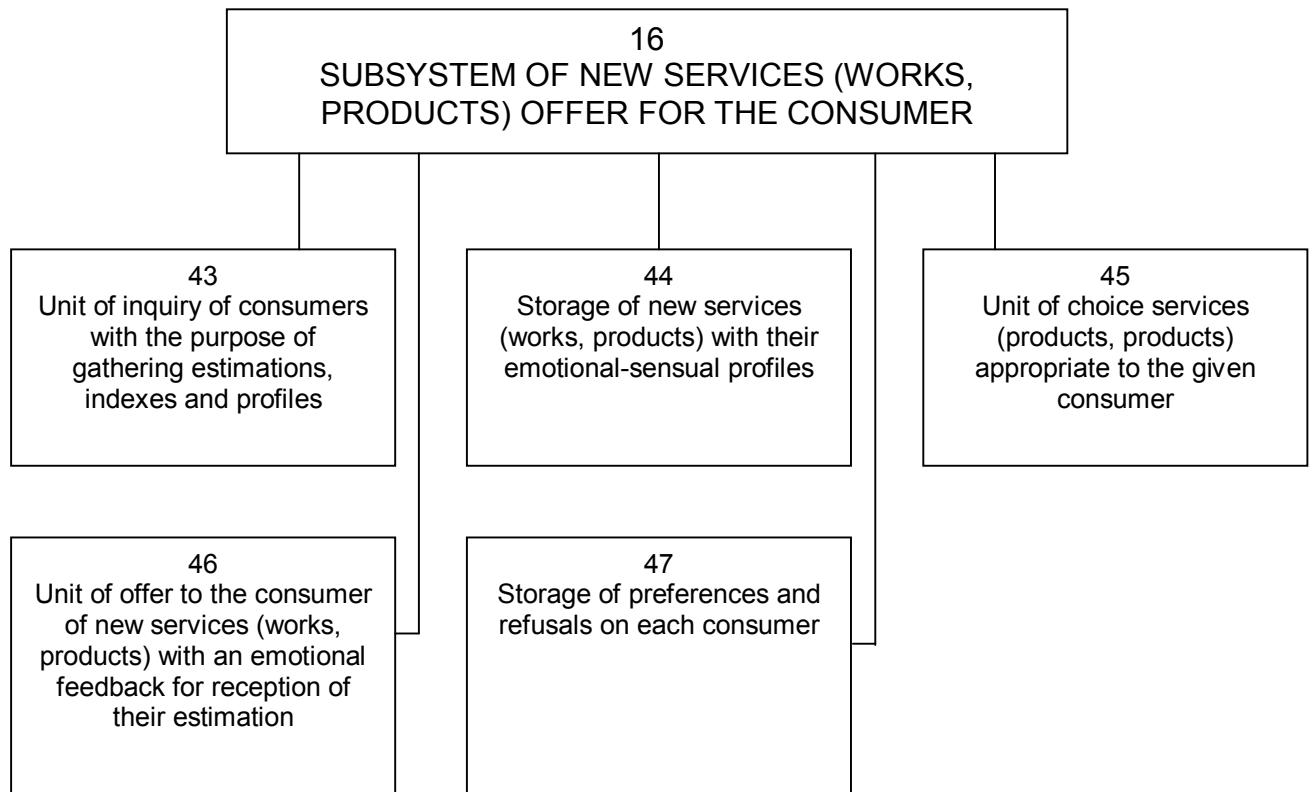


Fig. 6



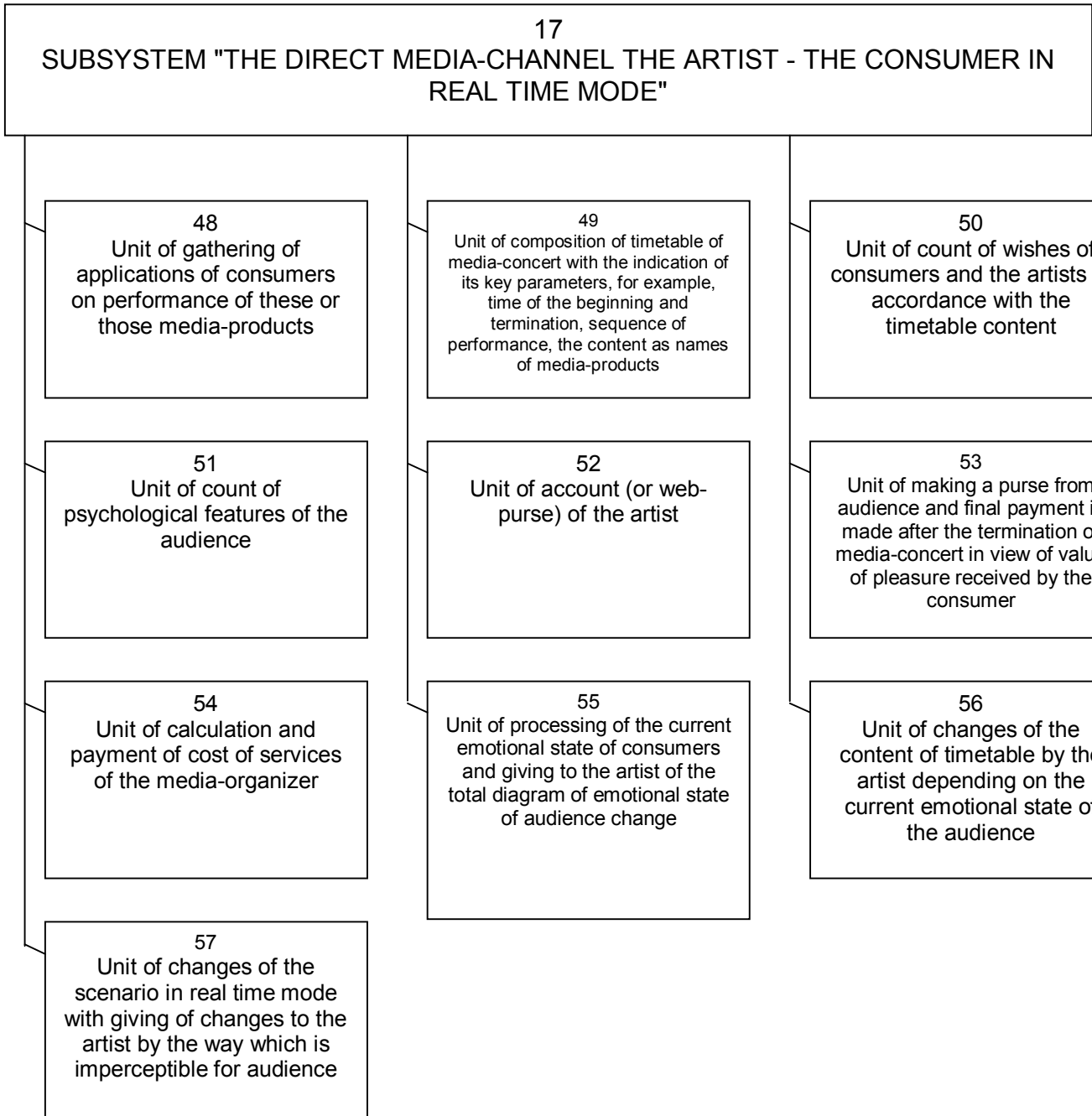


Fig. 7

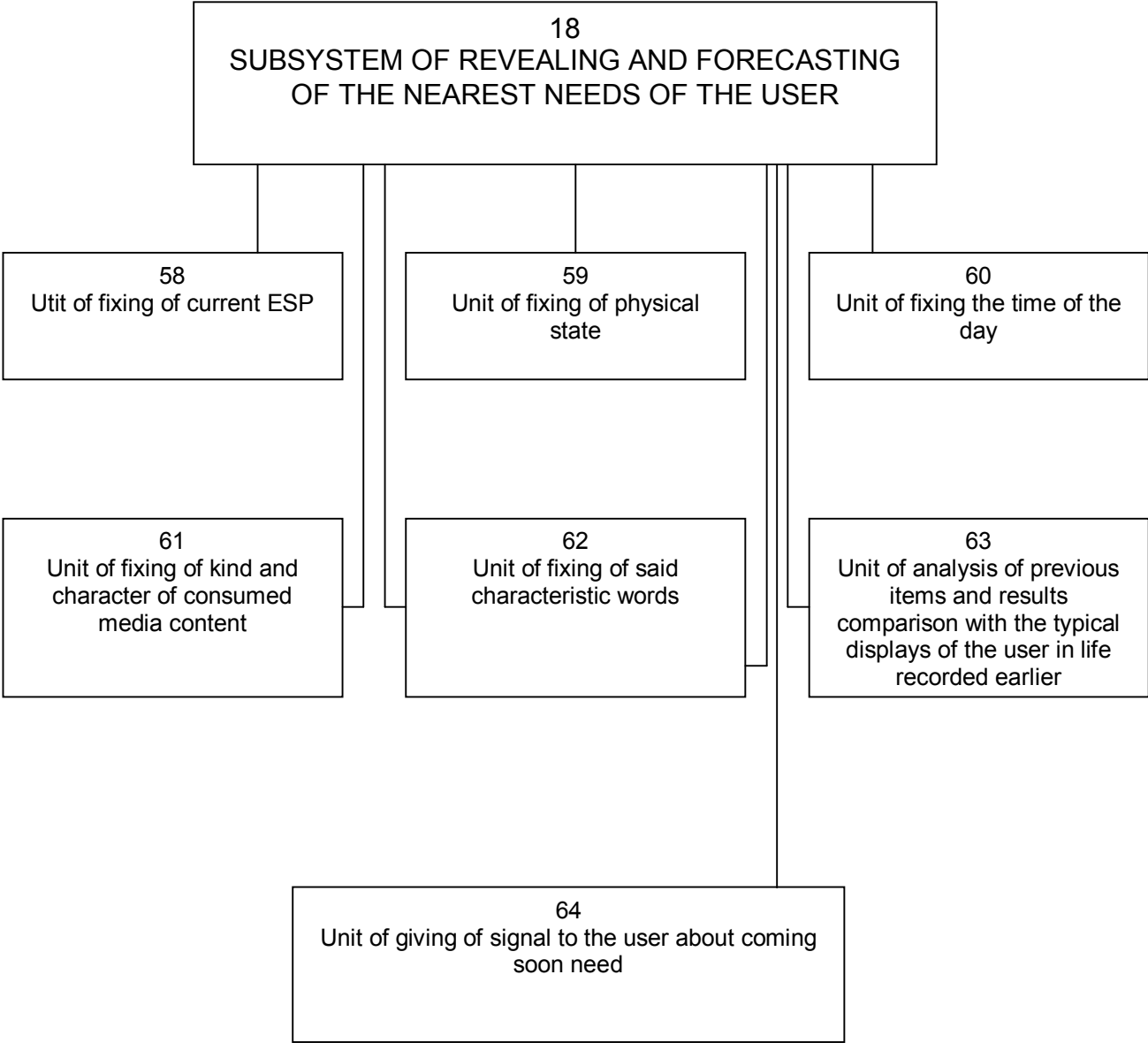


Fig. 8

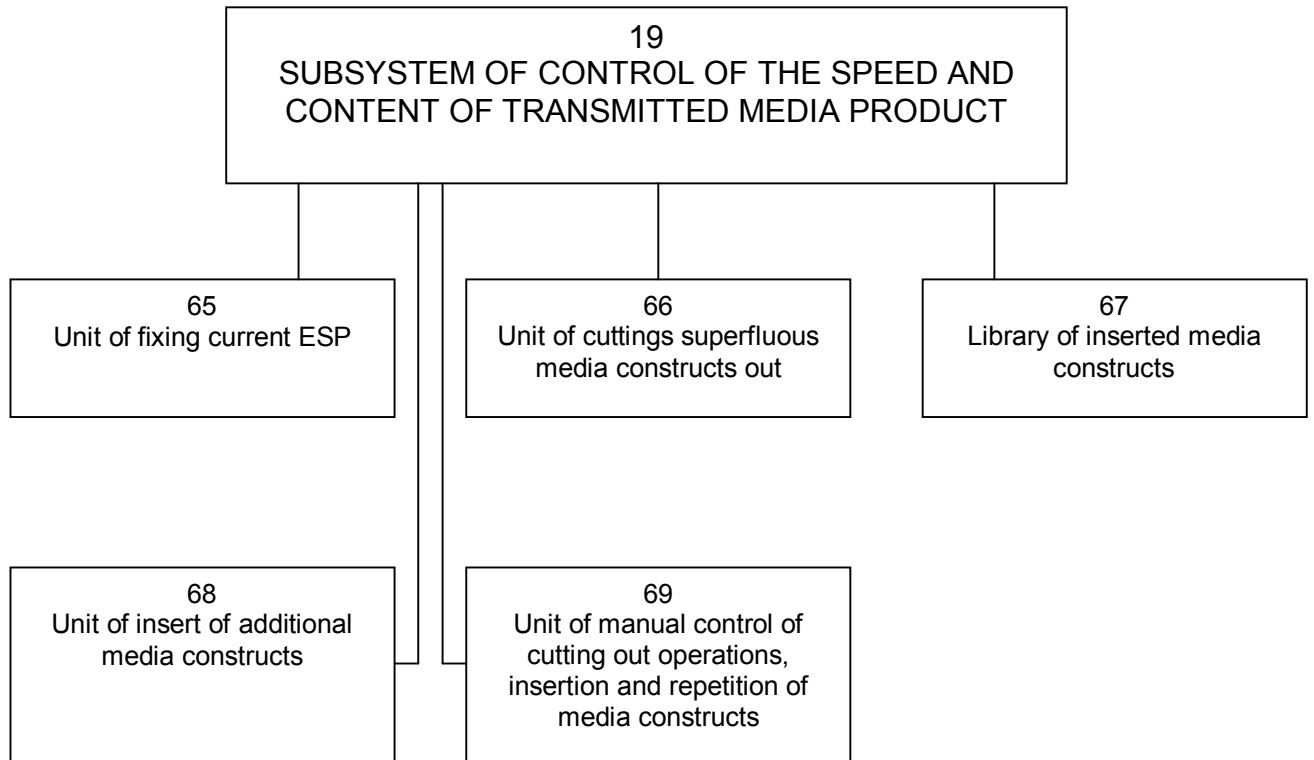


Fig. 9