- a reusable component should perform its functions in the most general way, so that the range of possible systems in which it can be embedded is the widest;
- compatibility of a reusable component: the component should strive to increase the level of negotiability of ostis-systems in which it is embedded and be able to be automatically integrated into other systems;
- self-sufficiency of components, that is, their ability to operate separately from other components without losing the appropriateness of their use.

In the *Subject domain of the library of reusable ostis-systems components*, the most common concepts and principles are described, which are valid for any *library of reusable components*. This subject domain allows building many different libraries, each of which will be semantically compatible with any other built according to the proposed principles. Such libraries store components and their specifications for use in child ostis-systems. An example of a specification of a reusable ostis-systems component is shown in Figure 4.

library of reusable ostis-systems components
⇒ *frequently used sc-identifier*:
[library of ostis-systems components]
⇒ *frequently used sc-identifier*:
[library of components]
:= [library of compatible reusable components]
:= [comprehensive library of reusable semantically compatible ostis-systems components]
:= [library of reusable and compatible components of intelligent computer systems of a new generation]
:= [library of typical ostis-systems components]
:= [library of reusable OSTIS components]
:= [library of reused OSTIS components]
:= [library of intelligent property ostis-systems components]
:= [library of ostis-systems ip-components]
∋ *typical example:*
OSTIS Metasystem Library
:= [Distributed library of typical (reusable) ostis-systems components as part of the OSTIS Metasystem]
:= [Library of reusable ostis-systems components as part of the OSTIS Metasystem]
∋ typical example:
OSTIS Metasystem Library
⇒ *frequently used sc-identifier*:
[OSTIS Library]
:= [Library of reusable and compatible components of intelligent computer systems of a new generation]
:= [Library of typical components of intelligent computer systems of a new generation]
:= [Distributed library of typical (reusable) ostis-systems components as part of the *OSTIS Ecosystem*]
:= [Library of reusable ostis-systems components as part of the *OSTIS Ecosystem*]
⇐ *combination*:
{• *-library of reusable components of ostis-systems knowledge bases*
• *library of reusable components of ostis-systems problem solvers*
• *library of reusable components of ostis-systems interfaces*
• *library of embedded ostis-systems*
• *library of ostis-platforms*
}

First versions for the full contents of the *Subject domain of reusable ostis-systems components* and the *Subject domain of the library of reusable ostis-systems components* are represented in the work [24].

The **manager of reusable ostis-systems components** is the main means of supporting component design of intelligent computer systems built by the *OSTIS Technology*. It allows installing reusable components in ostis-systems and controlling them. The Subject domain *of the manager of reusable ostis-systems components* contains the full specification for the manager of ostis-systems components, the requirements for the component manager, its functionality, the specification of the implementation option for the manager of ostis-systems components, including the sc-model of the knowledge base, the problem solver, and the interface.

Before considering the model of the *manager of reusable ostis-systems components*, let us consider the general model of *any library of reusable ostis-systems components, with which the component* manager interacts, and the most important classes of reusable components. Next, we will consider in more detail the fragments for sc-models of the *Subject domain of the manager of reusable ostis-systems components*.

IV. LIBRARY OF REUSABLE OSTIS-SYSTEMS COMPONENTS

The basis for the implementation of the component approach within the *OSTIS Technology* is the **OSTIS Metasystem Library**. The OSTIS Metasystem is focused on the development and practical implementation of methods and tools for component design of semantically compatible intelligent computer systems, which provides an opportunity to quickly create intelligent systems for various purposes. The *OSTIS Metasystem* includes the *OSTIS Metasystem Library*. The scope of practical application for the technology of component design of semantically compatible intelligent systems does not have any limits.