

# INVENTION DISCLOSURE

## 1. Invention Title.

### Methods for secure resource (physical, virtual) reservation

## 2. Invention Summary.

Methods for resource (physical, virtual) reservation to limit access to the resources by authorized users.

## 3. Invention Description.

Background:

- Today user can reserve resources (e.g. conference rooms) using reservation systems (e.g. exchange server)

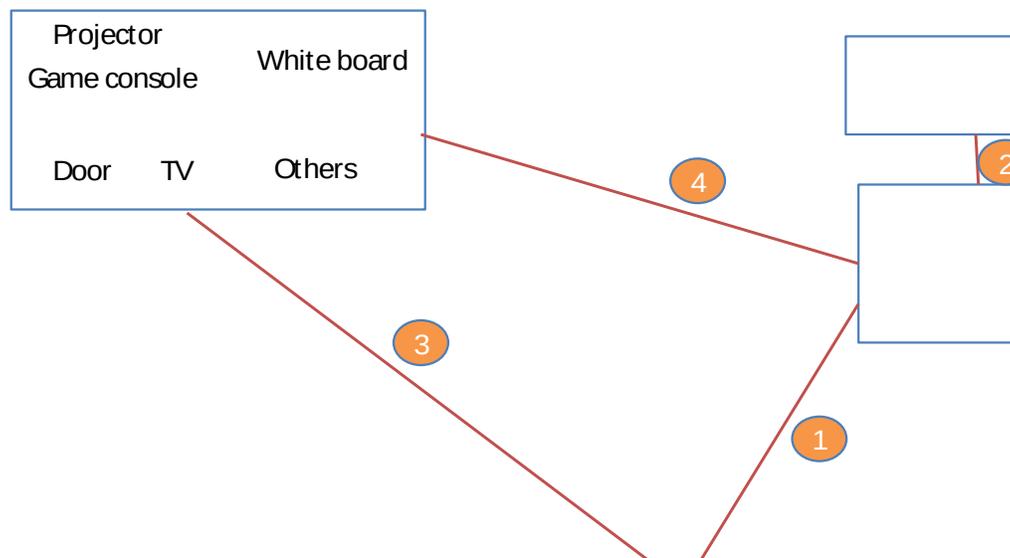
However the reservation system does not communicate with the resources to indicate who reserved the resources, for whom and for how long

As a result, anyone can use the reserved resources and conflicts are usually resolved through discussion

- Additionally more and more resources allow their usage remotely, which makes it even more important that only the folks who were on the resource reservation list have access to the system

### a. Describe the invention in detail.

## Reservation System for Physical Resources



# Details

b.

- 1 User requests access to a (or group of) physical resources from the reservation server
  - User provides the time slot and
  - The list of people who can have (active vs passive) access to the resources
- 2 Reservation server authenticates and authorizes the user with AAA
- 3 The user makes an attempt to access the system using his/her credentials (either in person or remotely)
- 4 Physical resource checks with the reservation server whether the user has access to the resource for this

**Why was the invention developed? What problem(s) does the invention solve? How is it better?**

- Control access to resources (physical and virtual) by authorized users who have either reserved the resources or the resources were reserved for them.

One such example of physical resource is access to a conference room. Use of projector is allowed only if one of the user on the reservation list is using the projector and the user provides correct credentials. With the introduction of IP enabled projectors, it will become more important that only authorized user can access the system since some folks may want to project their screen while being remote. We don't want anyone remote to change what's being projected while there is a meeting in progress. We also don't want anyone remote to project on the screen while they have not reserved the projector in advance.

- c. **Briefly outline the potential commercial value and customers of the invention.**  
 Reservation of resources (physical and virtual) is going to be important as more and more resources become IP enabled and allow remote access. For example, parents may want to reserve use of TV (e.g. video game console) by one child from 1-2 and by another child from 2-3. Children can enter their credentials to control TV for that period.

4. **HOW is this invention different from existing products, processes, systems?**

I don't think there is such a system today that allows reservation of the physical resources such as projector. Anyone can hook up their laptop to the projector and project their screen. There is definitely no known system, which has integrated physical resource (e.g. projector) with reservation server (e.g. exchange server)