

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TIMOTHY C. OSTWALD and DANIEL JAMES PLUTT

Appeal No. 2002-1252
Application No. 09/362,583

ON BRIEF

Before KRASS, JERRY SMITH and FLEMING, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 5, 12 and 14.

The invention is directed to a storage library structure for recording and retrieving information from a plurality of storage medium cartridges. By making the slots for holding cartridges, the media drives and the robotic mechanism for moving the

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cartridges between the slots and a media drive "co-planar," it is said that more cartridges are able to fit into the standard rack width, while maintaining the height and width of the storage library.

Independent claim 1 is reproduced as follows:

A storage library for recording and retrieving information from a plurality of storage media cartridges, wherein each storage media cartridge has a label side, the storage library comprising:

a housing having a left side, a right side, a front side, and a back side;

a left plurality of slots disposed proximate the left side of the housing for holding some of the plurality of storage media cartridges;

a right plurality of slots disposed proximate the right side of the housing for holding some of the plurality of storage media cartridges;

at least one media drive disposed proximate the back side of the housing, the at least one media drive being operative to receive one storage media cartridge of the plurality of storage media cartridges through a port; and

a robotic mechanism disposed between the left and right plurality of slots, the robotic mechanism being operative to move the plurality of storage media cartridges between the plurality of slots and the at least one media drive, wherein the robotic mechanism includes a track, a first linear carriage, a rotational carriage, and a picker assembly each entirely disposed between the left and right plurality of slots, wherein the track runs parallel to the left and right sides of the housing and perpendicular to the back side of the housing, the first linear carriage is disposed on the track and is operable for moving

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along the track in a path parallel to the left and right sides of the housing and perpendicular to the back side of the housing, the rotational carriage is disposed on the first linear carriage and is operable to rotate between the plurality of slots and the at least one media drive, the picker assembly is disposed on the rotational carriage and is operable to insert and remove a storage media cartridge from the plurality of slots and the at least one media drive;

wherein the plurality of slots, the at least one media drive, and the robotic mechanism are co-planar.

The examiner relies on the following references:

Noguchi	5,184,261	Feb. 2, 1993
Sato et al. (Sato)	5,293,284	Mar. 8, 1994

Claims 1, 12 and 14 stand rejected under 35 U.S.C. § 103 as unpatentable over Sato. Additionally, claims 1, 5, 12 and 14 stand rejected under 35 U.S.C. § 103 as unpatentable over Sato in view of Noguchi.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

At the outset, we note that, in accordance with the grouping of claims at page 4 of the principal brief, all claims will stand or fall together.

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At pages 3-4 of the answer, the examiner, citing Figures 1 and 2 and column 5, lines 9 and 33 of Sato, sets forth the elements of Sato believed to correspond to the instant claimed elements. The examiner recognizes that Sato does not teach the cassettes as having label sides. However, the examiner contends that it would have been obvious to provide the cassettes with labels, taking "Official Notice" that it was known to provide a label to corresponding sides of tape cartridges. Noguchi is cited for its teaching of providing a robotic mechanism with a bar code reader.

Appellants do not take issue with the obviousness of providing labels on storage media or the obviousness of providing a bar code reader. Rather, appellants stress the "co-planar" limitation of the instant claims, contending that the slots, drive and robotic mechanism in Sato are not co-planar, in contrast with the instant claimed invention.

The examiner cites Figure 1 of Sato, contending that "the upper bank of slots 15, the upper media drive 18, and the robotic mechanism 20 while moving horizontally along the upper bank of slots, would be coplanar in that a single common horizontal plane would pass through each of the upper bank of slots, the upper media drive, and the robotic mechanism" (answer-page 3).

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Appellants' counter is that Sato's cassette carrier 20 moves the cassettes between the vertical and horizontal postures for transferring the cassettes between the slots 15 and the media drives 18. Therefore, conclude appellants, "the slots 15 and the media drives 18 are not co-planar because they have opposite postures (vertical and horizontal)" (reply brief-page 2).

We understand the examiner's position to be that, at some point, when the cassette carrier 20 is at the top (as per Figure 1 of Sato), between media drive, or player unit, 18, and the upper slots holding cassettes, 15, elements 15, 18 and 20 will be aligned, or "co-planar," since one can draw a single, common plane through each of the elements.

We agree with appellants that Sato moves cassettes between horizontal and vertical postures for transferring the cassettes between the slots 15 and the media drives 18 and we are fully aware of the differences between the instant *disclosed* invention and that depicted by Sato. However, we do not believe that those differences are brought out in the instant *claimed* invention.

The claim's use of the term, "co-planar" is rather broad, and we simply cannot see how that term may be applied to the instant claimed invention but not to that shown by Sato.

While cassette carrier 20 may, at times, be aligned with the

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slots holding cassettes 15 and, at other times, it may be aligned with the port of media drive 18, it does not appear to us that all three elements can ever be aligned at the same time in Sato because, as far as we can tell, the port of media drive 18 and the slots holding cassettes 15 are oriented perpendicular to each other. However, as shown in the drawings, three elements appear to be "co-planar" in the same sense as appellants' elements.

The problem is, of course, the meaning to be ascribed the term "co-planar." This term typically applies to elements that are in the same plane so that a plane in which one element is a member will also include the other elements. This is easily understood when the elements have but one or two dimensions. However, when elements, such as slots, media drives and robotic mechanisms, have three dimensions, the term "co-planar" is not so clear. For example, since the slots, the media drive and the robotic mechanism all have some depth to them in a direction perpendicular to the page, what does it mean to say that these elements are "co-planar"? Are the three-dimensional elements themselves co-planar (this would be non-sensical) or is it some surface of these elements, like the edge of the media drive housing, or the plane across the opening of the slots, etc. which are co-planar? When the claims recite the "media drive" as being

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co-planar with other elements, does this refer to the port of the drive, a flat portion of the drive mechanism itself, or to the housing of the drive? Clearly, the term "co-planar," as broadly set forth in the instant claims, is not very descriptive of the invention.

While a rejection under 35 U.S.C. § 112, second paragraph, would clearly be warranted, we leave any such rejection up to the examiner in any future prosecution. For our purpose, we read the term "co-planar" as broadly as reasonably permitted, to mean that any portion(s) of the plurality of slots, the media drive, and the robotic mechanism lying in a common plane would meet the claim language, "wherein the plurality of slots, the at least one media drive, and the robotic mechanism are co-planar." Clearly, a quick reference to Sato's Figure 1 or 2 reveals that, at some point during transfer of the cassette from slot to drive unit, at least portions of drive unit 18, slots holding cassettes 15 and carrier (or robotic mechanism) 20 are co-planar. In fact, reference to figure 1 of Sato would appear to indicate that certain two-dimensional portions of elements 15, 18 and 20 are within the plane of the page upon which the drawing is depicted. Hence, these elements are "co-planar." Hence, the claim language is met.

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While it appears that appellants could easily have written the claims to clearly distinguish over Sato, for whatever reason, appellants have not done so. There is nothing in the instant claims which proscribes the cassette in Sato from being lifted out of the plane of the page during transfer from slot to drive unit.

Accordingly, we will sustain the rejection of claims 1, 5, 12 and 14 under 35 U.S.C. § 103.

The examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

ERROL A. KRASS)	
Administrative Patent Judge)	
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Administrative Patent Judge)	APPEALS AND
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