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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALYN R. HOLT and BRIAN R. MOORE

Appeal 2018-005316
Application 14/131,778
Technology Center 2800

Before ELENI MANTIS MERCADER, NORMAN H. BEAMER,
and ADAM J. PYONIN, *Administrative Patent Judges*.

MANTIS MERCADER, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–13, which constitute all the pending claims in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify inTEST Corporation as the real party in interest (App. Br. 2).

THE INVENTION

Appellants' claimed invention is directed to "docking an electronic test head with a peripheral" in which "[e]xact-constraint alignment features . . . are incorporated to provide repeatable positioning of the test head in three degrees of freedom with respect to the docking plane of the peripheral" (Abstract).

Independent claims 1 and 7, reproduced below, are representative of the subject matter on appeal:

1. A method of docking a test head to a peripheral, the test head having a test head docking plane, at least one component of an alignment feature and at least one component of a position-constraining feature, and the peripheral having a peripheral docking plane, at least one complimentary component of the alignment feature and at least one complimentary component of the position-constraining feature, the method comprising the steps of:

positioning the test head relative to the peripheral in a first position with the test head docking plane spaced from the peripheral docking plane;

moving the test head toward the peripheral, to a second position wherein the complimentary components of the position-constraining feature engage one another in a given relative positional relationship wherein the test head and peripheral are restrained from motion relative to one another in a direction parallel to the planes; and

moving the test head toward the peripheral, with the planes substantially parallel, to a third position wherein the complementary components of the alignment feature engage to maintain the planes at a docked distance from one another, the complementary components of the position-constraining feature maintaining the given relative positional relationship during such further movement;

wherein one of the components of the position-constraining features defines at least one contact surface and the complementary component of the position-constraining feature defines a mating surface that makes contact with the at least one contact surface at either point or line contact such that a reaction force between the at least one contact surface and the mating surface upon making contact is not parallel or perpendicular to the docking planes when the test head and device handler are docked.

7. An apparatus for docking a test head having a test head docking plane to a peripheral having a peripheral docking plane, the apparatus comprising:

at least one alignment feature including complimentary alignment components, one associated with the test head and the other associated with the peripheral device, the alignment components configured such that engagement therebetween controls the distance and the planar orientation of the docking planes relative to one another; and

at least one position-constraining feature including complementary constraining components, one associated with the test head and the other associated with the peripheral, one of the constraining components being compliant in a direction perpendicular to the docking planes,

wherein the constraining components are configured to engage one another in a given relative positional relationship when the docking planes are at a first relative position to one another wherein electrical contacts on the test head are separated from electrical contacts on the peripheral, the engaged constraining components restraining the test head and peripheral from motion relative to one another in a direction parallel to the docking planes, and

wherein the constraining components remain engaged, without moving relative to one another, while the test head is

moved to a docked position wherein the electrical contacts on the test head and the peripheral are conjoined.

App. Br. 12, 13–14 (Claims Appendix).

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is the following:

Montoya et al. ("Montoya")	US 5,656,943	Aug. 12, 1997
Slocum et al. ("Slocum")	US 5,678,944	Oct. 21, 1997

REJECTION

The Examiner made the following rejection:

Claims 1–13 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Montoya in view of Slocum. Final Act. 2.

ISSUES

The issues are whether the Examiner erred in:

1. finding motivation to combine Montoya and Slocum in the rejection of independent claim 1;
2. finding the combination of Montoya and Slocum teaches or suggests the limitation of "one of the constraining components being compliant in a direction perpendicular to the docking plane," as recited in independent claim 7.

ANALYSIS

We adopt the Examiner’s findings in the Answer and Final Office Action and we add the following primarily for emphasis. We note that if Appellants failed to present arguments on a particular rejection, we will not unilaterally review those uncontested aspects of the rejection. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential); *Hyatt v. Dudas*, 551 F.3d 1307, 1313–14 (Fed. Cir. 2008) (the Board may treat arguments Appellants failed to make for a given ground of rejection as waived).

Claim 1

Appellants argue that Slocum’s “Kinematics would not be used when a repeatability of 20 microns is sufficient” because Kinematics is “expensive to implement, and a company in the ATE industry would not create the additional expense and complexity of Kinematics when such repeatability is not necessary” in the system of Montoya (App. Br. 6). In support of their argument Appellants proffer the Declaration of Mr. Roy Green, Director of Engineering of inTEST Corporation (the “Declaration”).

The Declaration states that “[o]ne of ordinary skill in the art would understand” that the docking pins used in Montoya “would be accomplished with a repeatability between 50 and 75 microns” (Declaration 1) whereas “[k]inematic couplers are understood by one of ordinary skill in the art as providing repeatability of less than one micron” and “one of ordinary skill in the art would not use kinematic couplings in an application where 50 micron repeatability is required” because “[o]ne of ordinary skill in the art would not incur the expense” (Declaration 2).

We are not persuaded by Appellants' arguments, when considered with review of the Declaration for any supporting objective evidence of non-obviousness:

Once a prima facie case of obviousness was established below, the burden shifted to appellant to rebut it, if he could, with objective evidence of non-obviousness [T]he PTO must give full consideration to that evidence and render a decision based on the relative strength of appellant's showing and the prima facie case established by the references."

In re Keller, 642 F.2d 413, 425 (CCPA 1981) (citations omitted).

Here, the Declaration primarily asserts increased "expense" when combining the teachings of Montoya and Slocum as the objective evidence of non-obviousness. But our reviewing court has determined expense is insufficient:

the fact that the two disclosed apparatus would not be combined by businessmen for economic reasons is not the same as saying that it could not be done because skilled persons in the art felt that there was some technological incompatibility that prevented their combination. Only the latter fact is telling on the issue of nonobviousness.

Orthopedic Equip. Co., Inc. v. U.S., 702 F.2d 1005, 1013 (Fed. Cir. 1983).

Appellants supply no objective evidence of "some technological incompatibility" that prevents the combination of teachings of Montoya and Slocum. *Id.* The Examiner finds, and we agree, that in combination of the teachings of the references:

a sub-micron repeatability would be more desirable than a 20 micron repeatability as the submicron repeatability would be less likely to damage the pins. The problem to be solved is to ensure the most accurate mating means possible, which the combination of references seems to solve.

(Ans. 7). Furthermore, the test for obviousness is not whether the features of a second reference may be bodily incorporated into the structure of the primary reference. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d at 425 (citations omitted). We agree with the Examiner that “arguing that the combination is ‘too accurate’ or ‘too precise’ still does not negate that the combination not only solves the problem, but would actually provide a better solution . . . [than] what the appellant is claiming.” (Ans. 5).

Accordingly, we affirm the Examiner’s rejection of independent claim 1, and dependent claims 2–6 not separately argued. *See* App. Br. 7–11.

Claim 7

With respect to the claimed “one of the constraining components being compliant in a direction perpendicular to the docking planes,” Appellants argue the rejection provides “no information . . . regarding exactly where this disclosure allegedly may be found” (App. Br. 10). Particularly, Appellants argue that “Applicant’s representative has reviewed the reference and . . . [has] not found Applicant’s claimed ‘compliant’ feature” (App. Br. 10). Appellants offer no additional arguments regarding the patentability of claim 7. *See* App. Br. 10.

We are not persuaded by Appellants’ argument. The rejection relies on both Montoya and Slocum; regarding the meaning of the term “compliance,” Appellants’ disclosure states that:

[c]ompliance is provided in step 1750, which specifies that at least one surface of a pair of contactable contact and mating surfaces has the ability to move in a direction that is

substantially perpendicular to the docking plane. . . . US patent 6,678,944 [**Slocum**] also teaches providing this capability by way of a movable piston within a cylinder. This patent further teaches fabricating one of the surfaces in a spring-like fashion to provide this capability. The teachings of the '944 patent may therefore also be used in fulfilling this step.

(Spec. 47:26–35, emphasis added). Because Appellants' disclosure admits Slocum teaches the disputed limitation, we affirm the Examiner's rejection of independent claim 7, and dependent claims 8–13 not separately argued. *See App. Br. 7–11.*

CONCLUSION

The Examiner did not err in:

1. finding motivation to combine Montoya and Slocum in the rejection of independent claim 1;
2. finding the combination of Montoya and Slocum teaches or suggests the limitation of “one of the constraining components being compliant in a direction perpendicular to the docking plane,” as recited in independent claim 7.

DECISION

The Examiner's decision rejecting claims 1–13 under 35 U.S.C. § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED