

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

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RODNEY J. WEST

Appeal No. 1999-2259
Application 08/711,614¹

ON BRIEF

Before FLEMING, RUGGIERO, and BARRY, ***Administrative Patent Judges***.

FLEMING, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-4, 6-8 and 12. Claims 9 and

¹ Application for patent filed September 10, 1996.

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10 stand objected to. Claim 5 stands withdrawn from consideration. Claim 11 stands allowed.

The instant invention relates to busway electrical distribution systems. Busway systems include a number of stacked busbars enclosed within a housing which provides protection and support for the busbars. Appellant's specification ("Specification"), page 1, lines 13-18. Busway sections generally consists of the housing that includes a duct top, a duct bottom, two parallel duct sides extending along the longitudinal dimension of the busway section and a number of surge clamps which are placed across the duct top and duct bottom at each end of the busway sections and at predetermined intervals between the ends. Specification, page 4, line 19 to page 5, line 2. The surge clamps prevent or limit the short circuit damage that may occur to the housing when magnetic forces around the enclosed busbars push the busbars away from each other. Specification, page 1, line 29 to page 2, line 5. The invention at bar features an extruded surge clamp, assembled to a busway housing, that requires no blank shearing, forming or painting. Specification, page 6, lines 22-25. Each extruded surge clamp is quickly made by

cutting the surge clamp rawstock at a desired surge clamp length by using a shearing die or an abrasive cutoff saw. Specification, page 6, line 26 to page 7, line 1. The extruded surge clamp has at least one generally flat surface extending between a first end and a second end for engaging the generally flat surfaces of the duct top and duct bottom of the busway housing. Specification, page 7, lines 1-4. The surge clamp also defines a passage extending generally along its longitudinal axis between the first and second ends. Specification, page 7, lines 4-7. The flat surfaces of the surge clamp are placed against the duct top and duct bottom and fastening devices such as screws are received in the passage at each of the first and second ends. Specification, page 7, lines 9-15. The extruded surge clamp is also provided with an undercut extending along each side between the first and second ends to receive the hooks of a busway assembly tool. Specification, page 7, lines 15-19.

Appellant's independent claim 1, reproduced below, is representative of the invention:

1. A surge clamp for use on a number of busway housings each having a particular width, said surge clamp comprising:

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an extruded form being cuttable to a length determined by the particular width of any one of the busway housings on which it is to be used, said extruded form having at least one generally flat surface extending along a longitudinal axis of said surge clamp for continuously engaging a generally flat surface of said any one of the busway housings and defining a centrally located passage extending longitudinally from a first end of said surge clamp to a second end of said surge clamp.

In rejecting Appellant's claims, the Examiner relies on two references:

Slicer et al. (Slicer) 1987	4,705,334	Nov. 10,
Rinderer 1996	5,580,014	Dec. 3,

Claims 1 and 4 stand rejected under 35 U.S.C. § 102 as being anticipated by Rinderer. Claims 2, 3, 6-8 and 12 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Rinderer and Slicer. Rather than repeat the arguments of Appellant and Examiner, we refer the reader to

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the Appellant's Brief² and Examiner's Answer³ for the respective details thereof.

OPINION

With full consideration being given the subject matter on appeal, the Examiner's rejection and the arguments of Appellant and Examiner, for the reasons stated infra, we will reverse the Examiner's rejection of claims 1 and 4 under 35 U.S.C. § 102 as being anticipated by Rinderer. We will also reverse the Examiner's rejection of claims 2, 3, 6-8 and 12 under 35 U.S.C. § 103 as being unpatentable over Rinderer and Slicer.

Focusing first on the arguments related to claims 1 and 4, Appellant asserts that "Rinderer can not anticipate claim 1 of the present invention since he does not teach or suggest

² Appellant filed a Brief on Appeal on November 23, 1998. This brief was deemed non-compliant under 37 CFR 1.192(c). Appellant filed an amended Brief on Appeal on March 4, 1999 that was also non-compliant under 37 CFR 1.192(c). Appellant filed a second amended Brief on Appeal ("Brief") on May 7, 1999.

³ The Examiner, in response to Appellant's Brief, filed an Examiner's Answer on June 4, 1999.

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all of the claimed elements (i.e. a busway housing) and their limitations (i.e. a flat surface of the surge clamp continuously engaging the flat surface of the busway housing)." Brief at 7. Appellant further argues that if Rinderer does not anticipate claim 1, it [Rinderer] cannot anticipate dependent claim 4. Brief at 8.

The Examiner maintains that the features upon which the applicant relies (i.e. a housing having a flat surface) are not recited in the rejected claims [of Appellant]. Examiner's Answer, page 6. "What is claimed," asserts the Examiner, "is an extruded form being cuttable to a length determined by a particular width and having a generally flat surface extending along a longitudinal axis of the extruded form defining a centrally located passage extending from a first end to a second end." Examiner's Answer at page 6. The Examiner concludes that Rinderer discloses the extruded form being cuttable to a length in Figs. 1-5 being used as rungs for the cable tray. Examiner's Answer at page 6.

"A rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference." *In re Paulsen*, 30

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F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994). In addition, the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention. *Id.* The first step of an anticipation analysis is claim construction. *Helifix Ltd. v. Blok-Lok Ltd.*, 208 F.3d 1339, 1346, 54 USPQ2d, 1299, 1303 (Fed. Cir. 2000). It is already well-settled that claim construction includes a review of the claim language and the specification. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83, 39 USPQ2d 1573, 1576-77 (Fed. Cir. 1996). Ordinary principles of claim construction requires that "claim language be given its ordinary and accustomed meaning except where a different meaning is clearly set forth in the specification or where the accustomed meaning would deprive the claim of clarity." *Northern Telecom Ltd. V. Samsung Electronics Co.*, 215 F.3d 1281, 1287, 55 USPQ2d 1065, 1069 (Fed. Cir. 2000). In general, the plain language of the claim controls. *See Jackson v. Casio Phonemate, Inc.*, 105 F.2d 858, 875, 56 USPQ2d 1081, 1094 (Fed. Cir. 2000). The second

step in an anticipation analysis involves a comparison of the construed claim[s] to the prior art. *Id.*

Construing claim 1, we note that the claim language plainly requires at least the limitations of "a surge clamp"; "an extruded form being cuttable to a length"; "a number of busway housings"; and "said surge clamp for continuously engaging a generally flat surface of said any one of the busway housings" Appellant's specification discloses that surge clamps are fastened to the top and bottom of busway housings to limit or prevent damage to the housing caused by high short circuit magnetic forces. Busway housing includes a duct top, duct bottom, two generally parallel duct sides extending along the longitudinal dimension of the busway section and a number of surge clamps placed across the duct top and duct bottom. Specification, page 4.

Comparing the prior art, Rinderer discloses a ladder-type cable tray with rungs. Specifically, column 2, lines 32-35 reads:

The cable tray **20** comprises first and second generally parallel spaced-apart metal side rails **22, 24** and a plurality of metal rungs, each designated **26**, extending between the rails at intervals spaced along the rails.

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Each rung **26** has first and second opposite ends **28, 30** abutting the first and second side rails **22, 24,** respectively.

Further, at column 3, lines 36-38, Rinderer discloses that "[e]ach rung is preferably aluminum and may be formed by extrusion or other suitable method." Still further, at column 2, lines 52-54, Rinderer reads, "Electrical cable and wire placed in the cable tray **20** is adapted to rest on the upper flanges **38** of the rungs."

The plain language of Appellant's claim 1 requires a surge clamp of extruded form. Rinderer teaches cable tray rungs of extruded form. But one of ordinary skill in the art would not find that Rinderer's extruded cable tray rungs used to rest electrical cables and wires enables or describes an invention claiming an extruded surge clamp capable of resisting magnetic forces caused by high short circuits. No obvious relationship exists between these two elements designed for very different purposes.

Furthermore, the plain language of Appellant's claims also requires a busway housing(s). Rinderer teaches a cable tray with spaced apart metal side rails that structurally

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differs from the claimed busway housing having a duct top, duct bottom, and duct sides.

Because Rinderer discloses no teaching of a surge clamp or busway housing, Rinderer cannot anticipate Appellant's claim 1. Claim 4, lacking separate argument, stands or falls with independent claim 1. Accordingly, we reverse the Examiner's rejection of claims 1 and 4 under 35 U.S.C. § 102.

We turn now to analyze the obviousness rejections under 35 U.S.C. § 103.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). *See also In re Piasecki and Meyers*, 749 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed Cir. 1984). The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does

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the burden of coming forward with evidence or argument shift to the Appellants. *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788 ("After a prima facie case of obviousness has been established, the burden of going forward shifts to the applicant."). If the examiner fails to establish a **prima facie** case, the rejection is improper and accordingly merits reversal. *Fine*, 837 F.2d at 1074, 5 USPQ2d at 1598.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. **See In re Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444 ("In reviewing the examiner's decision on appeal, the Board must necessarily weigh all of the evidence and argument.").

We focus first on independent claim 6 which recites as follows:

6. A surge clamp for use on a busway housing, said surge clamp comprising:

an extruded form being cuttable to a length determined by a particular width of the busway housing, thus forming a surge clamp having a length equal to said particular width of the busway housing, said extruded form having at least one generally flat surface extending along a longitudinal axis of said surge clamp for continually engaging a generally flat surface of the busway housing, said extruded form further

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defining a centrally located passage extending longitudinally from a first end of said surge clamp to a second end of said surge clamp.

In Arguments, Appellant asserts that there is no teaching or suggestion in either Rinderer or Slicer that would lead one skilled in the art to discover the stated problem, or the solution to that problem as described and claimed in the application. Brief at page 9. The problem, Appellant states, "is concerned with eliminating the large inventories of manufactured surge clamps (and storage space) required for the various busway enclosure widths, and further, to eliminating the manufacturing processes required to make those surge clamps." Brief at 9. The Appellant maintains that Slicer's disclosure of the surge clamp is not sufficient to teach or suggest the prior art features and manufacturing processes required to discover the problem solved by the extruded surge clamp of the present invention. Brief at 9. Appellant continues, "[t]he problem, as stated in the present application and solved by the extruded surge clamps of the present invention, has nothing to do with 'strength and rigidity'." Brief at page 9. Additionally, Appellant asserts that there is insufficient disclosure in Slicer to suggest the

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method of making a surge clamp from an extruded rawstock similar to that disclosed in Rinderer. Brief at page 10. Finally, Appellant states that there is no teaching or suggestion of the stated problem in Rinderer. With respect to the combination of Rinderer and Slicer, Appellant contends that "although busway and cable tray both provide a means of distributing electricity from one point to another, the methods are fundamentally different as required by the intended function of each system. Therefore, one skilled in busway design and manufacturing would not look to cable tray for engineering solutions as one skilled in cable tray design and manufacturing would not look to busway for engineering solutions."

The Examiner rebuts that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to design the extruded form as taught by Rinderer to be installed in a busway housing . . . in order to add strength and rigidity to the clamp and to improve the structure['s] resistance to electrical surges." Examiner's Answer at page 6. The Examiner further asserts that "Rinderer teaches the extruded form having a generally flat

surface, . . . , [and] Slicer et al. teaches the use of a form having a generally flat surface for reinforcing a busway housing against surge loads." Examiner's Answer at page 8. Therefore, Examiner concludes, "In combination, Rinderer and Slicer et al. teach the disclosed surge clamp as claimed." Examiner's Answer at page 8.

We have already established, *supra*, that Rinderer does not teach or suggest a surge clamp. However, Slicer teaches a surge clamp at column 3, lines 59-62: ". . . a generally U-shaped surge clamp **98** which has opposite mounting tabs through which a fastener may connect the clamp **98** to the opposite rails." Slicer also teaches busway housing. Slicer's Figures 2 and 5 illustrate busway housing. Additionally, in Slicer, column 3, line 15-16 discloses, "The ground bus **42**, together with the pair of opposite side rails **38** form a housing for the main phase bus bars." However, Slicer does not teach or suggest a surge clamp of "an extruded form being cuttable to a length." Moreover, Slicer contains no "reason, suggestion or motivation" whereby a person of ordinary skill in the field of surge clamps would seek to combine the teaching of Slicer with

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the cable tray design teachings of Rinderer. **See Oetiker**, 977 F.2d 1443, 1447, 24 USPQ2d 1443, 1446.

The Federal Circuit instructs that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." **In re Fritch**, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), **citing In re Gordon**, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). It is further established that "such a suggestion may come from the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem." **Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.**, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), **citing In re Rinehart**, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976)(considering the problem to be solved in a determination of obviousness). The Federal Circuit reasons in **Para-Ordnance Mfg. Inc. v. SGS Importers Int'l Inc.**, 73 F.3d 1085, 1088-89, 37 USPQ2d 1237, 1239-40 (Fed. Cir. 1995), that for the determination of obviousness, the court must answer whether

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one of ordinary skill in the art who sets out to solve the problem and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants. However, "[o]bviousness may not be established using hindsight or in view of the teachings or suggestions of the invention." **Para-Ordnance Mfg. v. SGS Importers Int'l**, 73 F.3d at 1087, 37 USPQ2d at 1239, **citing W.L. Gore & Assocs., Inc. v. Garlock, Inc.**, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13. In addition, our reviewing court requires the PTO to make specific findings on a suggestion to combine prior art references. **In re Dembiczak**, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999). "The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a **prima facie** case of obviousness." **Oetiker**, 977 F.2d at 1447, 24 USPQ2d at 1446.

Based on the evidence and arguments presented, and the pertinent law in this matter, we find that the Examiner has failed to establish a **prima facie** case of unpatentability with

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respect to independent claim 6. Dependent claims 7 and 8, the patentability of which were not argued separately, stand or fall with independent claim 6. **See In re Sernaker**, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Accordingly, we reverse the Examiner's rejection of claims 6-8 as unpatentable over Rinderer and Slicer.

Claims 2 and 3 depend from claim 1 and incorporate the limitations of "surge clamp"; "an extruded form being cuttable to a length"; and "busway housing". Having already established that neither Rinderer or Slicer, alone or in combination, teach or suggest these required claim limitations, we find that the Examiner has failed to establish a **prima facie** case with respect to dependent claims 2 and 3. Accordingly, we reverse the Examiner's rejection of claims 2 and 3 as unpatentable over Rinderer and Slicer.

Considering now independent claim 12, it recites as follows:

12. A surge protection device for limiting structural damage which can be incurred by a busway housing and its enclosed electrical conductors during an electrical short circuit, said surge protection device comprising:

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an extruded form having at least one generally flat longitudinal surface and defining a centrally located passage extending longitudinally through said extruded form, said extruded form being cuttable into a plurality of surge clamps each one of said plurality of surge clamps having a particular length determined by a particular width of the busway housing on which said surge clamp is to be used, said surge clamps being transversely positioned on the busway housing such that said flat surface continuously engages a generally flat surface of the busway housing.

Claim 12 recites the limitations of "a surge clamp"; "an extruded form being cuttable into a plurality of surge clamps"; and "busway housing". We have already established that neither Rinderer or Slicer, alone or in combination, teach or suggest these required claim limitations. Therefore, Examiner has failed to establish a **prima facie** case of unpatentability with respect to independent claim 12. Accordingly, we also reverse the Examiner's rejection of claim 12 as unpatentable over Rinderer and Slicer.

In summary, we reverse the Examiner's rejection of claims 1 and 4 under 35 U.S.C. § 102 as anticipated by Rinderer. Additionally, we reverse the Examiner's rejection of

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claims 2, 3, 6-8 and 12 under 35 U.S.C. § 103 as unpatentable
over Rinderer and Slicer.

REVERSED

	MICHAEL R. FLEMING)	
	Administrative Patent Judge)	
)	
)	
)	BOARD OF
PATENT)	
	JOSEPH RUGGIERO)	APPEALS AND
	Administrative Patent Judge)	
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