

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GUANGSHAN ZHU

Appeal No. 2006-1404
Application No. 09/571,803
Technology Center 3700

ON BRIEF

Before FRANKFORT, OWENS, and LEVY, *Administrative Patent Judges*.
OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from a rejection of claims 1, 2, 4-7, 9-17, 19 and 21-32, which are all of the pending claims.

THE INVENTION

The appellant claims a food slicer having a unitary handle.
Claim 1 is illustrative:

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1. A slicer comprising:
 - a slicer body including a rotatable blade for slicing a product; and
 - a tray mounted for reciprocal movement relative said slicer body, said tray including a tray body and a support surface for supporting and moving said product relative said blade, said tray including a handle unitary with said tray to be gripped for manually moving said tray, wherein said handle is located generally below said support surface and extends from said tray at at least two spaced locations.

THE REFERENCES

| | | |
|------------------------------|--------------|---------------|
| Van Berkel | 1,954,605 | Apr. 10, 1934 |
| Reussenzehn | Des. 92,770 | Jul. 10, 1934 |
| Walker | Des. 148,203 | Dec. 23, 1947 |
| Cantatore et al. (Cantatore) | Des. 269,347 | Jun. 14, 1983 |
| Czala | 4,397,206 | Aug. 9, 1983 |

THE REJECTIONS

The claims stand rejected as follows: claims 1, 2, 4, 6, 7, 9-17, 19 and 21-32 1) under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Reussenzehn, and 2) under 35 U.S.C. § 103 as obvious over Reussenzehn in view of van Berkel; and claims 1, 2, 4-7, 9-17, 19 and 21-32 under 35 U.S.C. § 103 as obvious over 1) Czala in view of van Berkel and Walker, and 2) Cantatore in view of van Berkel and Walker.

OPINION

The rejections are affirmed as to claims 1, 2, 4,¹ 6,² 7, 9, 12, 13, 15-17, 19, 21-25, 27-29, 31 and 32, and reversed as to claims 5, 10, 11, 14, 26 and 30.

The appellant states that the claims stand or fall in the following groups: 1) claims 1, 2, 7, 9, 13, 17, 19 and 21, 2) claims 5, 26 and 30; 3) claims 4 and 16, 4) claims 10, 11 and 14, 5) claims 6, 12 and 15, 6) claims 22, 25 and 29, 7) claims 23, 27 and 31, and 8) claims 24, 28 and 32 (brief, page 5). Hence, we limit our discussions of the claims for which the rejections are affirmed to one claim in each group, i.e., claims 1, 4, 12, 22, 23 and 24. See 37 CFR § 41.37(c)(1)(vii)(2004).

*Rejections over Reussenzehn, alone
or in combination with van Berkel*

Claim 1

Reussenzehn discloses a slicer having a slicer body, a tray and a handle that appears to be fastened to two pieces extending from the tray (figures 3 and 4).

Van Berkel discloses a slicer having a handle (29) secured to a table (11) (page 1, lines 68-69).

¹ The rejections of claims 4 and 16 over Reussenzehn, alone or in combination with van Berkel are affirmed, but the other rejections of those claims are reversed.

The appellant argues that Reussenzehn's handle is not unitary with the tray because it is attached to the tray by a nut, screw or other fastener, and that Reussenzehn would not have suggested, to one of ordinary skill in the art, a handle that is unitary with the tray, i.e., a handle and tray that are one piece (brief, pages 5-8; reply brief, pages 2-9).

The appellant argues as though to meet the requirements of the appellant's claim 1, Reussenzehn's handle and tray protrusions to which it is attached must be one piece. The appellant's specification, however, does not define "unitary" as requiring one piece construction.³ Hence, we use the ordinary meaning of "unitary" (not the appellant's argued meaning (reply brief, pages 2-4)) which is "having the character of a unit", where a "unit" is "a single thing or person or group that is a constituent of a whole".^{4,5,6} See *Phillips v. AWH Corp.*, 415 F.3d

² The rejections of claims 6, 12 and 15 over Reussenzehn, alone or in combination with van Berkel are affirmed, but the other rejections of those claims are reversed.

³ Moreover, claim 10, which depends from claim 1 and requires that the tray body and handle are a single, cast piece of metal, indicates that claim 1 more broadly encompasses a tray body and handle that are not one piece.

⁴ *Webster's New Collegiate Dictionary* 1279-80 (G. & C. Merriam Co. 1973).

⁵ The appellant relies upon a dictionary definition of "unitary" as "undivided, whole" (brief, page 17; reply brief, pages 7-9), whereas the examiner relies upon a dictionary definition of "unitary" as: "Having the character of a unit: WHOLE", wherein "unit" is: "1. An individual group, structure, or other entity regarded as an elementary structural or functional constituent of a whole. 2. A group regarded as a distinct entity within a larger group" (answer, page 12). The broadest reasonable interpretation of "unitary" consistent with the appellant's specification is "having the character of a unit". Hence, we use that definition.

⁶ One case relied upon by the appellant, *Pall Corp. v. PTI Techs Inc.*, 259 F.3d 1383, 1391, 59 USPQ2d 1763, 1768 (Fed. Cir. 2001), the court stated that

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1303, 1312, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005), *cert. denied sub nom.*, 126 S. Ct. 1332 (2006). Reussenzehn's handle has the character of a single thing because it is fastened to the tray protrusions.

We therefore find the slicer claimed in the appellant's claim 1 to be anticipated by Reussenzehn. Accordingly, we affirm the rejection of claims 1, 2, 7, 9, 13, 17, 19 and 21 under 35 U.S.C. § 102(b) over Reussenzehn and, because anticipation is the epitome of obviousness, *see In re Skoner*, 517 F.2d 947, 950, 186 USPQ 80, 83 (CCPA 1975); *In re Pearson*, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974), we affirm the rejections of those claims under 35 U.S.C. § 103 over Reussenzehn and over Reussenzehn in view of van Berkel.⁷

the claims did not require a unitary structure but, rather, were open to two components welded together. The appellant's specification and the dictionary definitions of "unitary" do not give that term such a narrow meaning. The other cases relied upon by the appellant (reply brief, pages 5-6) do not limit "unitary" to "one piece". Thirteen of the patents relied upon by the appellant have in a portion cited by the appellant (reply brief, pages 6-7) the terms "unitary" and either "one-piece" or "single piece" either together or in close proximity, but do not indicate that if an article is unitary it must be one piece.

⁷ The appellant's reliance upon a declaration by Guangshan Zhu with respect to the rejection under 35 U.S.C. § 103 (brief, page 8), wherein Zhu states that there has been a long-felt need to eliminate gaps and spaces in food processing equipment (¶ 5) and that molding a single-piece handle is expensive (¶ 8), is unavailing to the appellant as to the affirmed rejections

Claims 26 and 30

Claims 26 and 30 require that the handle extends vertically between the at least two spaced locations.⁸

The handles of Reussenzehn (figures 1, 3 and 4) and van Berkel (figures 1 and 3) extend horizontally, and the examiner provides no explanation as to why it would have been prima facie obvious to one of ordinary skill in the art to orient them vertically.

Therefore, we reverse the rejections of claims 26 and 30 over Reussenzehn and over Reussenzehn in view of van Berkel.

Claim 4

Claim 4 depends from claim 1 and requires that the tray body includes a recessed area extending between the at least two locations at which the handle extends from the tray.

The appellant argues that the space between the legs of Reussenzehn's handle is not recessed but, rather, the surface of the tray body is flush with the surrounding area (brief, page 20). The tray protrusions to which Reussenzehn's handle are attached are part of the tray. Hence, the space between them is a recessed area of the tray body.

because the claims in those rejections do not require a single-piece handle or elimination of gaps and spaces.

⁸ Although claims 1 and 13 are of comparable scope, and their respective dependent claims 5 and 26 are of comparable scope, claim 5, unlike claim 26, is not rejected over Reussenzehn, alone or in combination with the other references.

We therefore affirm the rejections of claims 4 and 16 over Reussenzehn and over Reussenzehn in view of van Berkel.

Claims 10, 11 and 14

Claims 10, 11 and 14 require that the tray body and handle are a single, cast piece of metal.

The examiner states that "single, cast" "has not been given significant patentable weight, since the method of forming the device is not germane to the issue of patentability of the device itself" (answer, page 6).⁹ That limitation is not a method step but, rather, is a structural requirement of the slicer, i.e., the tray body and handle must have the structure of a single, cast piece of metal.

The examiner argues that the applied references render claims 10, 11 and 14 obvious (answer, page 25), but the examiner does not provide a basis for that argument.

For the above reasons we reverse the rejections of claims 10, 11 and 14 over Reussenzehn and over Reussenzehn in view of van Berkel.

Claim 12

Claim 12 depends from claim 1 and requires that the tray includes at least two generally curved surfaces, each surface

⁹ Regarding the "single, cast" limitation the examiner directs the appellant's attention to GB 438,208, page 4, lines 113-120 (answer, page 6, footnote 1). We do not address this reference because it is not included in the statement

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being located adjacent to one of the at least two locations to form a smooth transition between the tray body and the handle.

The appellant argues that Reussenzehn discloses a flared out structure (reply brief, page 20). Reussenzehn's protrusions from the tray, which the appellant refers to as a flared out structure, have generally curved surfaces that are located adjacent to the two locations where the handle is attached to the tray body and form a smooth transition between the tray body and the handle.

Consequently, we affirm the rejections of claim 6, 12 and 15 over Reussenzehn and over Reussenzehn in view of van Berkel.

Claim 22

Claim 22 depends from claim 1 and requires that the handle is generally spaced apart from the support surface.

The appellant argues that the handles of Reussenzehn and van Berkel are coupled to and extend from the support surface (brief, page 19). The surface of Reussenzehn's tray that contacts the food is a support surface for the food, and the handle is generally spaced apart from that support surface, i.e., it is attached to the opposite side of the tray.

of a rejection and, therefore, is not properly before us. See *In re Hoch*, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970).

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We therefore affirm the rejections of claims 22, 25 and 29 over Reussenzehn and over Reussenzehn in view of van Berkel.

Claim 23

Claim 23 depends from claim 1 and requires that the tray body extends generally downwardly from the support surface, and the handle is unitary with the tray body.

The appellant argues that Reussenzehn's slicer does not include any generally downwardly extending structure from which the handle extends (brief, page 19). Reussenzehn's tray body is below the support surface that supports the food and, therefore, extends generally downwardly from the support surface.

Thus, we affirm the rejections of claims 23, 27 and 31 over Reussenzehn and over Reussenzehn in view of van Berkel.

Claim 24

Claim 24 depends from claim 1 and requires that the tray body extends generally downwardly from the support surface, and the handle extends from the tray body at least partially along a direction of reciprocal movement of the tray.

The appellant argues that the handles of Reussenzehn and van Berkel extend perpendicular to the direction of movement of the product relative to the blade and, therefore, do not extend at least partially along a direction of reciprocal movement of the tray. Claim 24 does not require that the handle extends

perpendicular to the direction of movement of the product relative to the blade but, rather, requires that the handle extends from the tray body at least partially along a direction of reciprocal movement of the tray. The handles of Reussenzehn (figures 1, 3 and 4) and van Berkel (figures 1 and 3) both extend from the tray body at least partially along a direction of reciprocal movement of the tray.

Accordingly, we affirm the rejections of claims 24, 28 and 32 over Reussenzehn and over Reussenzehn in view of van Berkel.

*Rejections over Czala in view of
van Berkel and Walker*

Claim 1

Czala discloses a slicer having a handle (to the left of numeral 14 and its arrow in figure 1) that is fastened to a tray in an undisclosed manner.

Walker discloses a vegetable cutter having a curved handle attached thereto at only one end (figures 1-3).

The appellant argues that Czala does not disclose that the handle is unitary with the tray, and that "the handle could easily be coupled to the tray by various internal or non-visible means, such as adhesives, small welds, internal fasteners, snap attachments, interengaging geometries, etc." (brief, page 12). As discussed above regarding the rejections over Reussenzehn,

the broadest reasonable interpretation of "unitary" consistent with the appellant's specification does not exclude those attachments.

The appellant argues that van Berkel's handle could not be used on Czala's slicer because Czala's slicer lacks any flanges to which van Berkel's horizontally extending handle could be coupled (brief, page 13). Van Berkel's handle, which is attached to the side of table 11, could be attached in the same manner to the side of hopper 4 to which Czala's handle is attached.

The appellant argues that Walker's handle does not extend from at least two locations (brief, page 13). A handle extending from at least two locations is disclosed by van Berkel (figure 3, element 29).

For the above reasons we are not convinced of reversible error in the examiner's rejection of claim 1 over Czala in view of van Berkel and Walker. Hence, we affirm the rejection of claims 1, 2, 7, 9, 13, 17, 19 and 21 over those references.

Claims 4 and 16

The examiner argues that Czala discloses a recessed area between the inside bend of the handle and the leg portion near item 14 in figure 1 (answer, pages 7 and 25). Claims 4 and 16 require that the tray body includes a recessed area. The

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examiner's argument regarding the handle having a recessed area is not pertinent to that limitation.

Accordingly, we reverse the rejection of claims 4 and 16 over Czala in view of van Berkel and Walker.

Claims 5, 26 and 30

The examiner asserts that Czala modified by van Berkel and Walker render obvious a handle that extends generally vertically between at least two locations at which it is attached to the tray, but the examiner provides no explanation as to why or how one of ordinary skill in the art would have combined the references to arrive at such a configuration (answer, page 25).

Consequently, we reverse the rejection of claims 5, 26 and 30 over Czala in view of van Berkel and Walker.

Claims 10, 11 and 14

The examiner's argument regarding claims 10, 11 and 14 is the same as that set forth with respect to the rejections over Reussenzehn, alone or in combination with van Berkel (answer, page 8). The rejection of claims 10, 11 and 14 over Czala in view of van Berkel and Walker is reversed for the reasons given above regarding the rejections over Reussenzehn, alone or in combination with van Berkel.

Claims 6, 12 and 15

The examiner argues that Czala's handle has an arcuate shape at its attachment point, and van Berkel's handle appears to show arcuate shapes at the juncture between the legs and the tray (answer, page 26).

The appellant argues that at the handle/tray junction, the handles of Czala and van Berkel form sharp, well defined angles (brief, page 22).

Czala's figure 1 and van Berkel's figure 3 shows that the handle is straight at the junction between the handle and the tray. The handles have some curvature farther from the tray, but no curvature that reasonably can be considered arcuate.

Consequently, we reverse the rejection of claims 6, 12 and 15 over Czala in view of van Berkel.

Claim 22

The appellant argues that the handles of Czala and van Berkel are coupled to and extend from the support surface (brief, page 19). The support surface reasonably can be considered to be the surface of the tray that supports the food. In both Czala and van Berkel the handle is on the opposite side of the tray from the support surface and, therefore, is generally spaced apart from the support surface.

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Therefore, we affirm the rejection over Czala in view of van Berkel of claims 22, 25 and 29.

Claim 23

The appellant argues that Czala and van Berkel do not disclose a tray body that extends generally downwardly from a support surface (brief, page 19). The tray bodies of Czala and van Berkel are below the surface that supports the food and, therefore, extend generally downwardly from the support surface.

Hence, we affirm the rejection of claims 23, 27 and 31 over Czala in view of van Berkel.

Claim 24

The appellant argues that the handles of Czala and van Berkel extend perpendicular to the direction of movement of the product relative to the blade (brief, pages 19-20). Claim 24 requires that the handle extends from the tray body at least partially along a direction of reciprocal movement of the tray. Van Berkel's handle (figures 1 and 3) extends from the tray body at least partially along a direction of reciprocal movement of the tray.

We therefore are not convinced of reversible error in the examiner's rejection of claim 24 over Czala in view of

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van Berkel. Accordingly, we affirm the rejection of claims 24, 28 and 32 over those references.

*Rejection over Cantatore in view of
van Berkel and Walker*

Claim 1

Cantatore discloses a food slicer having what appears to be a handle attached at one location below a tray (figures 1 and 4).

The appellant argues that Cantatore does not disclose that the handle is unitary with the tray (brief, pages 14-15). The handle is at least fastened to the tray and, as discussed above regarding the rejections over Reussenzehn, the broadest reasonable interpretation of "unitary" consistent with the specification includes such fastening.

The appellant argues that Cantatore's handle extends downwardly away from the tray, and lacks any flanges to which van Berkel's horizontally extending handle could be attached (brief, page 16). Cantatore's handle is attached to the tray (figures 1 and 4), and van Berkel's handle could be attached to that tray the same way it is attached to van Berkel's tray (figures 1 and 3).

The appellant argues that Walker's handle does not extend from at least two locations (brief, page 16). A handle

extending from at least two locations is disclosed by van Berkel (figure 3, element 29).

For the above reasons we affirm the rejection of claims 1, 2, 7, 9, 13, 17, 19 and 21 over Cantatore in view of van Berkel and Walker.

Claims 4 and 16

The examiner argues that "[i]n Cantatore et al, the area between the wedge shape and the rectangular shape of the leg to which the handle is attached is deemed to define a recess" (answer, page 25). Claims 4 and 16, however, require a recess in the tray body, not the handle. The examiner has not explained how Cantatore, van Berkel and Walker would have fairly suggested that claim requirement to one of ordinary skill in the art.

Hence, we reverse the rejection of claims 4 and 16 over Cantatore in view of van Berkel and Walker.

Claims 5, 26 and 30

The examiner asserts that Cantatore modified by van Berkel and Walker would have rendered obvious a handle that extends generally vertically between at least two locations at which it is attached to the tray, but the examiner provides no explanation as to why or how one of ordinary skill in the art

would have combined the references to arrive at that configuration (answer, page 25).

We therefore reverse the rejection of claims 5, 26 and 30 over Cantatore in view of van Berkel and Walker.

Claims 10, 11 and 14

The examiner's argument regarding claims 10, 11 and 14 is the same as that set forth with respect to the rejections over Reussenzehn, alone or in combination with van Berkel (answer, pages 10-11). The rejection of claims 10, 11 and 14 over Cantatore in view of van Berkel and Walker is reversed for the reasons given above regarding the rejections over Reussenzehn, alone or in combination with van Berkel.

Claims 6, 12 and 15

The examiner argues that in view of van Berkel and Walker it would have been obvious to one of ordinary skill in the art to provide Cantatore's handle with arcuate or curved surfaces as a matter of aesthetic and ergonomic design choice (answer, page 10). Van Berkel's handle is not curved at its points of attachment (figure 3). Walker's handle is curved at its sole point of attachment but, like Cantatore's handle (figure 1), it is attached at only one end (figure 1). None of the handles is disclosed as being ergonomic, and the examiner has not explained how a desire for aesthetic appearance would have led one of

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ordinary skill in the art to combine the features of the handles pointed out by the examiner in such a manner that a handle which extends from a tray in at least two spaced locations and has the curvature requirement of the appellant's claim 6, 12 or 15 is obtained.

We therefore reverse the rejection of claims 6, 12 and 15 over Cantatore in view of van Berkel and Walker.

Claims 22-25, 27-29, 31 and 32

Regarding the rejection of claims 22-25, 27-29, 31 and 32 over Cantatore in view of van Berkel and Walker the appellant relies upon the same arguments set forth with respect to the rejection of those claims over Czala in view of van Berkel and Walker. Those arguments are not persuasive for the reasons given above regarding the rejection over Czala in view of van Berkel and Walker.

Consequently, we affirm the rejection of claims 22-25, 27-29, 31 and 32 over Cantatore in view of van Berkel and Walker.

DECISION

The rejections of claims 1, 2, 4, 6, 7, 9-17, 19 and 21-32 under 35 U.S.C. § 102(b) over Reussenzehn and under 35 U.S.C. § 103 over Reussenzehn and over Reussenzehn in view of van Berkel are affirmed as to claims 1, 2, 4, 6, 7, 9, 12, 13, 15-17, 19, 21-25, 27-29, 31 and 32, and reversed as to claims

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10, 11, 14, 26 and 30. The rejections of claims 1, 2, 4-7, 9-17, 19 and 21-32 under 35 U.S.C. § 103 over Czala in view of van Berkel and Walker and over Cantatore in view of van Berkel and Walker are affirmed as to claims 1, 2, 7, 9, 13, 17, 19, 21-25, 27-29, 31 and 32, and reversed as to claims 4-6, 10-12, 14-16, 26 and 30.

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

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AFFIRMED-IN-PART

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| CHARLES E. FRANKFORT |) | |
| Administrative Patent Judge |) | |
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| |) | BOARD OF PATENT |
| TERRY J. OWENS |) | APPEALS |
| Administrative Patent Judge |) | AND |
| |) | INTERFERENCES |
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| Administrative Patent Judge |) | |

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