

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AKIRA YONEZAWA, KAZUYA WATANABE
and MASAHIKO ONO

Appeal 2007-2419
Application 10/681,413¹
Technology Center 3600

Decided:

Before FRED E. McKELVEY, *Senior Administrative Patent Judge*, and
RICHARD E. SCHAFER, and SALLY C. MEDLEY, *Administrative Patent
Judges*.

MEDLEY, *Administrative Patent Judge*.

DECISION ON APPEAL

1 **A. Statement of the Case**

2 Applicants appeal under 35 U.S.C. § 134 from a final rejection of
3 claims 1-3. We have jurisdiction under 35 U.S.C. § 6(b).

1 Application for patent filed 7 October 2003. The real party in interest is Fujicopian Co., Ltd.

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

3 Masahiko JP 6-127774 May 10, 1994
4 (as translated)

5 Hofmann US 5,328,510 Jul. 12, 1994

6 Stevens US 6,568,450 May 27, 2003

7 Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being
8 unpatentable over Stevens in view of Masahiko and Hofmann (Final
9 Rejection 2 and Answer 3).

BACKGROUND

11 The invention relates to a coating film transfer tool for transferring a
12 covering film, an adhesive film or decorative film to a receiving surface.

13 An embodiment of the film transfer tool, Figure 1 of the Specification,
14 is as shown below:

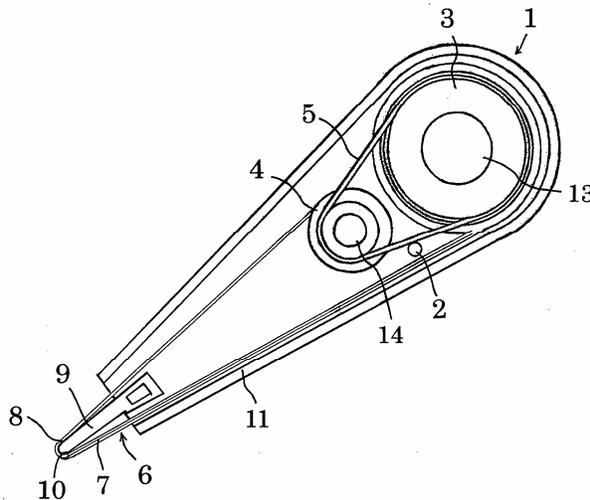


FIG. 1

1 The transfer tool includes a supply reel **3** on shaft **13**, a take up reel **4**
2 on shaft **14**, and a rubber belt **5** for cooperatively connecting the supply reel **3**
3 and take up reel **4**. A transfer tape **6**, formed by coating one surface of a base
4 tape **8** with a coating film **7**, is wound around the supply reel **3**.

5 In operation, the tape **6** is unwound from the supply reel **3** and pressed
6 against a receiving surface by tip **10** of transfer head **9**, transferring coating **7**
7 to the receiving surface. The invention differs from the prior art in that a
8 guide member **2** is positioned between the supply reel **3** and take-up reel **4**.
9 The guide member **2** is described as preventing the portion of the belt **5**
10 between the supply reel **3** and take-up reel **4** from sagging (Specification
11 ¶ 9).

12 **B. Issue**

13 The issue is whether Applicant has shown that the Examiner erred in
14 determining claims 1-3 to be unpatentable under 35 U.S.C. § 103(a) over the
15 prior art.

16 **C. Findings of fact (“FF”)**

17 The record supports the following findings of fact as well as any other
18 findings of fact set forth in this opinion by at least a preponderance of the
19 evidence.

20 1. Applicants’ claims 1-3 are the subject of this appeal.

21 2. Applicants characterize claim 1, the sole independent claim as a
22 Jepson-type claim (Appeal Br. 6).

1 3. Applicants acknowledge that the preamble and the first four
2 paragraphs that follow the preamble encompass the known prior art (Id.).

3 4. The improvement is defined by the last paragraph, e.g., essentially a
4 belt guide member **2** shown in the above figure (Id.).

5 5. Claim 1, the sole independent claim² is as follows with the
6 improvement highlighted:

7 1. A coating film transfer tool comprising:

8 a supply reel **3** having a transfer tape **6** wound thereon, the
9 transfer tape **6** comprising a base tape **8** coated with a coating film **7**;

10 a transfer head **9** for pressing the transfer tape **6** against a
11 receiving surface to transfer the coating film **7** thereto;

12 a take-up reel **4** for taking up used base tape **8**, said base tape **8**
13 extending from the supply reel **3**, past the transfer head **9**, to the take-
14 up reel **4** and being capable of exerting a pulling force tending to
15 unwind base tape from the supply reel **3** when the transfer head **9** is
16 moved over a receiving surface and thereby causing the supply reel **3**
17 to rotate in a first direction; and

18 a driving mechanism comprising a first belt-engaging pulley on
19 the supply reel **3**, a second belt-engaging pulley on the take-up reel **4**,
20 and an endless belt **5** frictionally engaged with both pulleys, capable of
21 slipping on the belt-engaging pulley on the take-up reel **4**, and
22 cooperatively connecting the supply reel **3** in driving relationship with

² References to Fig. 2 are for illustrative purposes.

1 the take-up reel **4**, the diameter of the first pulley being greater than the
2 diameter of the second pulley, whereby the rate of rotation of the take-
3 up reel **4**, when driven through the belt **5** by the supply reel **3** would be
4 greater than the rate of rotation of the supply reel **3**, if the take-up reel
5 were not constrained by the base tape extending from the supply reel **3**,
6 past the transfer head **9**, to the take-up reel **4**;

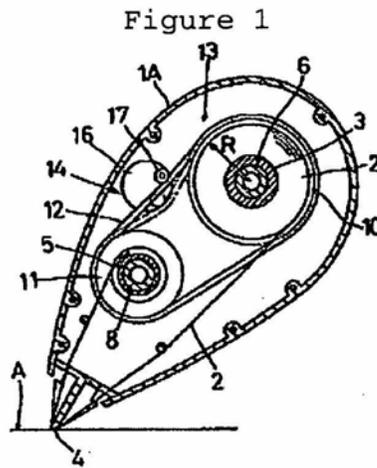
7 *wherein a belt guide **2** for guiding said belt is disposed between*
8 *the supply reel **3** and the take-up reel **4**, in contact with a section of*
9 *the belt **5** which moves from the pulley of the supply reel to the pulley*
10 *of the take-up reel when the supply reel **3** rotates in said first direction.*

11 Stevens

12 6. The Examiner found that Stevens (**Fig. 1**) describes a coating film
13 transfer tool with a supply reel **6**, a take up reel **7**, a transfer tape **18** with
14 coated base tape **18'**, a transfer head **11**, and a belt-driving mechanism (belt –
15 **8**). (Final Rejection 2 and Answer 3).

16 7. The Examiner found that the claimed subject matter of claim 1
17 differs from Stevens in that Stevens does not describe a belt guide. (Id.).

1 Masahiko
2 8. Figure 1 of Masahiko is shown below:



3
4
5 9. The Examiner found that Masahiko describes a coating film transfer
6 tool with a belt guide **17** (pressing roller) used for accommodating tension of
7 the endless belt **12**. (Final Rejection 2-3 and Answer 4).
8 10. The Examiner found that it would have been obvious to use a belt
9 guide on the Stevens belt as taught by Masahiko, since Masahiko describes
10 using the belt guide to vary the tension in the belt.
11 11. The Examiner found, however, that the claimed subject matter of
12 claim 1 differs from the combination of Stevens and Masahiko in that the

1 combination (Masahiko) fails to show the belt guide **17** contacting the belt as
2 it travels from the supply reel to the take-up reel.

3 12. Instead, the Masahiko belt guide **17** contacts the belt as it travels
4 from the take-up reel to the supply reel. (Final Rejection 3 Answer 4).

5 13. Masahiko describes a torque varying mechanism **14** which can
6 change the rotary torque of the delivery core **3** (“slip torque”) by adjusting
7 the tension of belt **12**. (Masahiko ¶ 9).

8 14. Masahiko describes adjusting the tension of the belt **12** by
9 controlling a knob **15**, which in turn forces a pressing roller **17** into belt **12**.
10 (Id.).

11 15. The amount of pressure applied to belt **12** from pressing roller **17**
12 is adjustable. (Id.).

13 16. Masahiko contemplates placing the roller **17** in alternative
14 locations on the belt.

15 17. Masahiko describes that the press roller **17** may be arranged at the
16 inner circumference side of the round-head belt **12**, so that the slip torque can
17 be increased as the round belt **12** is pressed towards the outer circumference
18 side with the press roller **17**. (Masahiko ¶ 11).

19 18. Masahiko describes with respect to the Fig. 5 embodiment,
20 adjusting the slip torque using a v-shaped swinging arm **21** with a roller **20** to
21 press roller **17** into the belt **12**.

22 19. Masahiko describes that “due to the large tension of round belt **12**,
23 the still friction force between the round belt **12** and large-diameter/small-

1 diameter pulleys **10, 11** becomes greater, providing a large slip torque M.”
2 (Masahiko ¶ 12).

3 Hofmann

4 20. The Examiner found that Hofmann describes a belt drive
5 mechanism with a belt guide (Figures **6-7**, tension roll **55**) for controlling
6 slack and tension in the belt **72**. (Final rejection 3 and Answer 4).

7 21. The Examiner further found that the belt guide **55** contacts the
8 portion of the belt **72** as it travels from the pulley with the large diameter
9 (analogous to the supply reel) toward the pulley with the small diameter
10 (analogous to the take up reel). (Id.).

11 22. The Examiner found that it would have been obvious to locate the
12 belt guide along the belt as it travels from the supply reel to the take-up reel,
13 since Hofmann shows the arrangement to be functionally equivalent to the
14 placement of the Masahiko belt guide. (Id.).

15 Applicants' arguments

16 23. Applicants agree with the Examiner's findings with respect to
17 Stevens (Appeal Br. 7).

18 24. Applicants' argue that the Masahiko torque varying mechanism 14
19 is mounted on a rotatable plate for adjustment of slip torque and that:

20 If the torque varying mechanism were instead placed on the side
21 of the belt that moves from the supply reel to the take-up reel,
22 part of its range of motion would be utilized merely in taking up
23 the slack created when the transfer tool is operated. In that
24 position, the torque varying mechanism would be less effective

1 in controlling slippage of the belt on the pulleys, and would not
2 be expected to adjust slip satisfactorily.
3

4 25. The Examiner responded and maintained that:

5 Although Masahiko shows the tensioning roller to be disposed
6 in contact with the section of the belt which moves from the
7 pulley of the take-up reel to the pulley of the supply reel, the text
8 is silent as to a required location of the roller. Because the
9 tensioning roller of Masahiko would increase the travel path of
10 the transfer belt and consequently increase the tension in the
11 transfer belt regardless of whether the tensioning roller contacts
12 the belt as it moves from the pulley of the take-up reel to the
13 pulley of the supply reel or as it moves from the pulley of the
14 supply reel to the pulley of the take-up reel, one of ordinary skill
15 in the art would realize that the tensioning roller could be
16 effective in the location shown by Hofmann.
17

18 **D. Principles of Law**

19 A claimed invention is not patentable if the subject matter of the
20 claimed invention would have been obvious to a person having ordinary skill
21 in the art. 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727,
22 82 USPQ2d 1385 (2007); *Graham v. John Deere Co. of Kansas City*, 383
23 U.S. 1 (1966).

24 Facts relevant to a determination of obviousness include (1) the scope
25 and content of the prior art, (2) any differences between the claimed
26 invention and the prior art, (3) the level of skill in the art and (4) any relevant
27 objective evidence of obviousness or non-obviousness. *KSR*, 82 USPQ2d at
28 1388, *Graham*, 383 U.S. at 17.

1 **E. Analysis**

2 Applicants argue claims 1-3 together as a group. Applicants
3 acknowledge that Stevens describes everything but the claimed belt guide
4 (FF 23). Applicants apparently agree that Masahiko describes a “belt guide,”
5 but that the belt guide is on the wrong side of the belt (FF 24). Applicants
6 argue that one of ordinary skill in the art would not have been motivated to
7 put the Masahiko “belt guide” **17** on the side of the belt that moves from the
8 supply reel to the take-up reel. Applicants opine that if the Masahiko torque
9 varying mechanism were placed on the side of the belt that moves from the
10 supply reel to the take-up reel, that part of “its range of motion would be
11 utilized merely in taking up the slack created” when the tool is operated.
12 Applicants argue that as a result, the torque varying mechanism would be less
13 effective in controlling slippage of the belt and would not be expected to
14 adjust slip satisfactorily (FF 24).

15 Applicants have failed to direct us to evidence to support the assertions
16 made. The Examiner found that there is nothing in the Masahiko reference
17 itself that would tend to support Applicants’ theory (FF 25). Although
18 Masahiko does not appear to expressly describe placing the roller **17** on the
19 side of the belt that travels from supply reel to take-up reel, Masahiko
20 describes placing the roller in different locations along the belt (FFs 16 and
21 17). One having ordinary skill in the art would understand the interplay of
22 the forces involved in tensioning the belt and balancing the forces between
23 the supply reel and the take-up reel in the Masahiko transfer tool. Therefore,

1 one of ordinary skill in the art would have known how to use the Masahiko
2 adjustable roller **17** to adjust and achieve the desired tension in the belt and
3 therefore balance the forces between the supply reel and take-up reel (FF 19).

4 One of ordinary skill in the art would have known that placing pressure on
5 the belt in any location along the belt would effect the belt tension and
6 achieve the desired result, e.g., change the slip torque.

7 Applicants have not demonstrated whether the placement of the roller
8 along one side of the belt versus another is better or performs some new
9 function or achieves some unexpected result. To the extent applicants
10 maintain there is some new function, better performance or an unexpected
11 result, they must show so. *In re Klosak*, 455 F.2d 1077, 173 USPQ 14
12 (CCPA 1972). The showing must be clear and convincing. *McClain v.*
13 *Ortmayer*, 141 U.S. 419, 429 1891) (conclusive evidence need to show
14 invention performs some new and important function not performed by the
15 prior art); *In re Heyna*, 360 F.2d 222, 228, 149 USPQ 692, 697 (CCPA 1966)
16 (applicant required to submit clear and convincing evidence to support an
17 allegation of unexpected property). *See also In re Passal*, 426 F.2d 409, 412,
18 165 USPQ 702, 704 (CCPA 1970) and *In re Lohr*, 317 F.2d 388, 392, 137
19 USPQ 548, 550-51 (1963) (conclusive proof of unexpected results not
20 submitted by applicant).

21 We will not credit Applicants' unsupported argument. *Rohm & Haas*
22 *Co. v. Brotech Corp.*, 127 F.3d 1089, 1092, 44 USPQ2d 1459, 1462 (Fed.
23 Cir. 1997) (Nothing in the rules or in jurisprudence requires trier of fact to

1 credit unsupported or conclusory assertions). Based on the record before us,
2 it would have been obvious to locate the Masahiko roller in any location
3 along the belt, including on the side of the belt that moves from the supply
4 reel to the take-up reel.

5 This case, while not identical, is reminiscent of *Sakraida v. AG Pro,*
6 *Inc.*, 425 U.S. 273, 189 USPQ 449 (1976) (known elements rearranged to
7 make new, but obvious, water flush system) and *Graham v. John Deere Co.*,
8 383 U.S. 1 (1966) (farm plow spring clamp changed from above hinge plate
9 to below hinge plate to make new, but obvious, farm plow implement).

10 For these reasons, we sustain the Examiner's rejection of claims 1-3.

11 **F. Decision**

12 Upon consideration of the record, and for the reasons given, the
13 Examiner's rejection of claims 1-3 under 35 U.S.C. § 103(a) as being
14 unpatentable over Stevens, Masahiko and Hofmann is affirmed.

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

AFFIRMED

Appeal 2007-2419
Application 10/681,413

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