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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASASHI AOKI

Appeal 2007-1908
Application 10/442,950[1]
Technology Center 3700

Decided: July 3, 2007

Before: TERRY J. OWENS, STUART S. LEVY, and LINDA E. HORNER, *Administrative Patent Judges*.

LEVY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection of claims 3-6.[2] We have jurisdiction under 35 U.S.C. § 6(b) (2002).

---

[1] Application filed May 22, 2003. The Application is a division of Application No. 08/808,181 filed February 28, 1997. The real party in interest is Fuji Photo Film Co., Ltd. of Japan (Br. 4).

[2] Claims 1-2 have been cancelled. Claims 7-10 have been withdrawn from consideration. (*Id.*)

Appellant invented a method of switching arrangements of cutting knives to change the slitting width in a slitter for slitting a wide sheet into a plurality of narrow strips, by a plurality of cutting knives arranged at predetermined intervals (Specification 1).

The only independent claim under appeal reads as follows:

> 3. A method of switching cutting knife arrangements, from a current one of n-sorts of cutting knife arrangements to another one of said n-sorts of cutting knife arrangements, in a slitter for slitting a wide sheet into a plurality of narrow strips by use of a plurality of cutting knives mounted on a shaft extending in a direction substantially normal to the direction in which the wide sheet is fed, the switching cutting knife arrangements being controlled by a controller, the method comprising:
>
> returning the cutting knives individually from respective positions for said current one of said n-sorts of cutting knife arrangements to respective origin positions according to one of predetermined n-sets of knife returning programs for said current one of said n-sorts of cutting knife arrangements, each of said predetermined n-sets of knife returning programs being stored in a memory; and
>
> moving the cutting knives individually from said respective origin positions to respective positions for said another one of said n-sorts of cutting knife arrangements according to one of predetermined n-sets of knife positioning programs for said another one of said n-sorts of cutting knife arrangements, each of said predetermined n-sets of knife positioning programs being stored in a memory.

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

Hirakawa	US 4,010,677	Mar. 8, 1977
Coburn ‘495	US 4,214,495	Jul. 29, 1980
Coburn ‘761	US 4,237,761	Dec. 9, 1980
Linn	US 4,269,097	May 26, 1981
Seki	US 4,843,933	Jul. 4, 1989
Miller	US 5,125,301	Jun. 30, 1992

The Examiner rejected claims 3-6 under 35 U.S.C. § 103(a) (2004) as being unpatentable over Coburn '495, incorporating by reference Coburn '761, in view of Miller, Hirakawa, Linn, and Seki.

We begin with independent claim 3. For the reasons, *infra*, we need not address the contentions regarding claims 4-6. Appellant contends (Br. 7) that

> [t]he Examiner appears to be relying on the Abstract of Coburn ‘761 that indicates that the heads are moved ‘individually’ or as a group. However, Appellant submits that the mere disclosure of the heads being ‘moveable individually’ (without more) does not teach the specific features of ‘<u>returning the cutting knives individually from respective positions</u>,’ and ‘<u>moving the cutting knives individually from said respective origin positions to respective positions</u>.’ For example, the language ‘movable individually’ in Coburn ‘761 may apply to the moving of the scoring heads as they are initially slid into each other to form a group, which is then pushed together as a whole, as taught by the Coburn ‘761.

Appellant further contends (*id*.) that an artisan would not be taught the claimed "origin position" by the "parking position" of Coburn '495. Appellant additionally contends (Br. 8) that “[t]hus, neither Coburn ‘495 nor Coburn ‘761 teaches moving cutting knives individually from an origin

position respectively to a cutting position, and moving the cutting knives individually from the cutting position to the origin position, as in claim 3."

With regard to Miller, Appellant contends (*id.*) that Miller does not make up for the deficiencies of the Coburn references. Turning to the Hirakawa, Linn, and Seki references, Appellant contends that these references move their respective elements in a manner similar to Coburn '495. It is argued (Br. 9) that each of Hirakawa, Linn, and Seki move their heads as a group, which precludes a teaching or suggestion of "returning the cutting knives *individually* from respective positions," and " moving the cutting knives individually from said respective origin positions to respective positions." In the Reply Brief (p. 6) Appellant additionally contends that "there is no disclosure in either of Coburn '761, Hirakawa, nor the additional references regarding whether the word 'individually' is used in regard to *returning* the cutting knives, *moving* the cutting knives individually *from said perspective origin positions*, or whether it pertains to some other movement. There simply is not enough disclosure for one to presume what is intended to be meant by the mere word 'individually,' as sparingly used in the references." Appellant additionally contends (Reply Br. 7) that "the Examiner acknowledges that the applied references really do not explain what they specifically mean by 'individually.' The obviousness rejection is not properly supported based on the word 'individually' alone. Claim 3 clearly includes more features than just the operation of moving an individual blade."

The Examiner contends (Answer 3) that in Coburn '495, the cutting knives are moved from a cutting arrangement to an origin or park position,

and then moved, in sequence to a second cutting arrangement. It is asserted (Answer 3) that "[t]here is little doubt that Coburn's device has multiple blade returning and positioning 'programs' stored in his computer memory. Unfortunately, Coburn does not discuss these mundane details, so Miller et al is brought in to flesh them out." The Examiner adds (Answer 4) that "[w]hether or not the blades are moved in a group or individually is a well known variable, with either option being acceptable, as evidenced by Coburn's related patent (4,237,761, abstract), Seki (lines 21-23, column 1), Lin [sic] (abstract) and Hirakawa (line 62-68, col 1)."

With respect to the Hirakawa, Linn and Seki references, the Examiner contends (Answer 7) that

> Appellants argue that Hirakawa, Linn and Seki all move their knives as a group instead of individually. This appears to be nothing more than wishful thinking, since all three references explicitly mention the option of moving the blades individually, as set forth above. Appellant further argues that there is no motivation to combine Hirakawa, Linn and Seki with the Coburn references. Examiner points out that Hirakawa, Linn and Seki are merely provided to show that moving the blades individually is ubiquitous in the art.

We reverse.

ISSUE

The issue before us is whether the combined teachings and suggestions of Coburn '495, Coburn '761, Miller, Hirakawa, Linn, and Seki would have suggested to an artisan the language of claim 3. The issue turns on whether the prior art would have suggested individually returning the cutting knives to their origin positions and individually moving the knives

from their origin positions to another cutting knife arrangement, as recited in claim 3.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427, 7 USPQ2d 1152, 1156 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Appellant invented a method of switching arrangements of cutting knives to change the slitting width in a slitter for slitting a wide sheet into a plurality of narrow strips by a plurality of cutting knives arranged at predetermined intervals (Specification 1).

From our review of Coburn '495 we make the following findings of fact:

2. "A corrugator is an integrated group of machines for manufacturing sheets of double face corrugated paperboard and includes a slitter scorer which is conventionally located downstream from a rotary shear and upstream from a cut-off machine." (Coburn '495, col. 1, ll. 5-9).

3. "The slitter scorer slits the web of double face corrugated board longitudinally and scores the web by applying crease lines longitudinally thereon." (Coburn '495, col. 1, ll. 9-12).

4. "An upper pair of rotatable slitter shafts is provided downstream from an upper pair of scorer shafts. A lower pair of

rotatable slitter shafts are provided downstream from a lower pair of scorer shafts." (Coburn '495, col. 1, ll. 51-54).

5. "Each tool positioner has a parking position adjacent one of said side frames." (Coburn '495, col. 1, ll. 65-68).

6. "A single motor is supported by one of said side frames and coupled to said shafts for selectively driving all of the pairs of shafts, or only the upper pairs of shafts, or only the lower pairs of shafts." (Coburn '495, col. 2, ll. 1-4).

7. "The slitter scorer 10 is downstream from the web guide means 12, 14 which in turn is downstream from a web diverter 16." (Coburn '495, col. 3, ll. 2-4).

8. "[S]litter scorer 10 includes an upper pair of slitter shafts 54, 56 which are rotatably supported by the side frames 40, 42. The shafts 54, 56 are downstream from a pair of upper scorer shafts 58, 60 similarly supported by the side frames 40, 42." (Coburn '495, col. 3, ll. 63-67).

9. "Each tool positioner 62, 64, 74, 76 has a parking or inoperative position adjacent frame 40." (Coburn '495, col. 4, ll. 54-56).

10. "Each tool positioner is substantially similar to that shown in patent application Ser. No. 908,608 in the name of Robert E. Coburn and assigned to the assignee herein. Patent application Ser. No. 908,608 is included herein by reference to describe the apparatus more explicitly." (Coburn '495, col. 4, ll. 57-62).

11. "Clutch 106 is disengaged and clutch 132 is engaged. Clutch 154 remains disengaged. Motor 164 is energized to move the tool

positioners 74, 76 whereby each of the tool on shafts 66, 68, 70 and 72 is moved to a parking position adjacent the side frame 40. Thereafter, in a known manner, the tool positioners 74, 76 position the respective tools on their associated shafts in accordance with the requirements for the next production run." (Coburn '495, col. 10, ll. 43-50).

From our review of Coburn '761 we make the following findings of fact:

> 12. A corrugated paperboard slitter scorer has slitting and scoring heads movable individually or as a group along an expandable shaft by way of a master shifter. The expandable shaft provides a friction drag to maintain a head in position until all heads are simultaneously locked to the shaft.

(Coburn '761, abstract).

> 13. The general sequence of events for changing the position of the heads 34 is as follows. Tube 46 is exhausted. The master shifter 64 moves from one end of the shaft 30 to the other so that all of the heads are moved to one end of the shaft 30.
>
> The fingers 76-82 on the master shifter 64 are then retracted. Thereafter, the master shifter 64 moves and distributes the heads 34 to the new position for the next production order.
>
> As the master shifter 64 moves, it pushes all of the heads in front of it until the last head reaches its predetermined position. At that point, the master shifter stops and the fingers 76-82 are retracted. Then the master shifter moves forward through a distance corresponding to the thickness of the last head at which point the fingers are then extended. Thereafter, the master shifter 64 continues to push the remainder of the heads until the then existing last head reaches its predetermined position. The sequence is then repeated until all of the operative

> heads have been disposed along their predetermined position. The remaining heads in front of the master shifter 64 are then pushed to one side and will remain operative. Thereafter, tube 46 is expanded to lock the heads.

(Coburn '761, col. 4, ll. 4-27).

From our review of Miller we make the following findings of fact:

14. "[T]he invention relates to, but is not limited to, the positioning of carriages of the type which hold shearing, scoring or creasing tools in an array transverse to a longitudinally-moving web of paper," (Miller, col. 1, ll. 9-12).

15. In most of these systems, the limitation on speed is a result of the inability of the drive member to move the respective carriages bidirectionally simultaneously when repositioning them. Rather, all carriages must usually be moved first in one direction to position some of them, and thereafter in the opposite direction to position the remainder, requiring a time-consuming multi-step process.

(Miller, col. 1, ll. 38-46).

16. "[I]f power is interrupted for any reason, the stored pulse counts of all of the position sensors are lost, requiring time-consuming return of all of the carriages to the reference position for recalibration of the position sensors before positioning can be determined or repositioning can occur." (Miller, col. 1, l. 67-col. 2, l. 4).

17. Thus, with the band 36 driven unidirectionally with a continuous motion, simultaneous activation of the clutch assemblies 50 of any of the carriages 32 to engage the upper portion 36a of the band will move such carriages in the same direction simultaneously. Conversely, simultaneous activation

> of the bottom clutch assemblies 52 of any of the carriages to engage the bottom portion 36b of the band will move such carriages in the opposite direction simultaneously.

(Miller, col. 5, ll. 48-56).

18. Since it is necessary in most circumstances to supply fluid power to the exterior tool, the central portion 32c of the carriage face is likewise utilized to provide a fluid conduit 84 which, in the exemplary embodiment shown in the figures, is used to extend or retract the upper knife 24 vertically, and also to move it axially with respect to its mating lower knife 26 in a known manner.

(Miller, col. 7, ll. 18-24).

19. "The controller 100 is programmed to control the positions of the respective carriages 32." (Miller, col. 8, ll. 46-47).

20. "Upon energizing of the system, the controller causes the display 102a to indicate the existing positions of the respective carriages, both graphically and numerically." (Miller, col. 8, ll. 49-52).

21. [E]ach position sensor 54 transmits a discrete signal to the controller representative of the absolute position of its particular carriage, permitting the controller immediately to indicate the respective carriage positions on the display. This saves considerable time not only when initially starting the system but also when resuming operation after a temporary power failure.

(Miller, col. 8, ll. 56-63).

22. In the absence of any operator command from the terminal 102 requesting the initiation of a repositioning operation, the controller continues to transmit display signals indicating the

> current position of each carriage 32. However, upon its receipt of a repositioning command, the controller prepares to reposition the carriages either in accordance with a predetermined set of positions stored in its memory and accessed by the operator's entry of a corresponding program number, or pursuant to the operator's entry of detailed information regarding the number of active knives and the desired new web widths.

(Miller, col. 8, l. 63-col. 9 l. 6).

From our review of Hirakawa we make the following findings of fact"

23. "The present invention relates to an apparatus for positioning heads in a machine which has a uniaxial multi-head structure and which necessitates to position said heads (working tools) such as, for example, a corrugate machine, a slitter-scorer, etc." (Hirakawa, col. 1, ll. 3-7).

24. [T]here is provided an apparatus for positioning a plurality of heads provided slidably along a shaft, in which said respective heads are disposed and set at any desired positions along said shaft through the steps of conveying said heads either individually or in groups each consisting of two or more heads by means of a shifter, isolating each said head from said shifter to set it when it reaches a desired position, and repeating the aforementioned operations, characterized in that said shifter is constructed of a slave shifter provided with means for holding and releasing said head and a master shifter provided with means for reciprocating said slave shifter along said shaft by a predetermined distance relative to said master shifter.

(Hirakawa, col. 1, l. 58- col. 2, l. 4).

25. [S]aid respective heads are disposed and set at any desired positions along said shaft through the steps of conveying said heads either individually or in groups each consisting of two or more heads by means of a shifter, isolating each said head from

> said shifter to leave it when it reaches a desired position, and repeating the aforementioned operations as described above, the number of the shifters can be reduced to one at the minimum.

(Hirakawa, col. 2, ll. 7-15).

26. The hold-release means operates in the direction for separating from the head to release the same head, and thus the setting at the first setting point is completed. Nextly, the reciprocating means on the master shifter operates to advance the slave shifter and the hold-release means provided thereon by a predetermined distance so that the hold-release means may be opposed to the head to be conveyed and set secondly. Then the hold-release means is actuated towards the head to hold the same. Subsequently, the movement of the master shifter is restarted, and soon the master shifter is brought in contact with the slave shifter. Thereafter the masterslave shifter and the head move jointly towards a second setting point, and when they come to the second setting point the head is set in a similar manner to the first head.

(Hirakawa, col. 2, ll. 33-48).

27. [T]he positioning apparatus according to the present invention is constructed in such manner that at each setting point firstly the master-slave shifter stops, a head to be set there is released, then only the slave shifter advances by a predetermined distance and holds a head to be set subsequently, and finally the master-slave shifter advances jointly. In other words, before start of movement of the master shifter the head to be set subsequently is held by the slave-shifter.

(Hirakawa, col. 2, ll. 53-61).

28. [A]fter the master-slave shifter has stopped, the hold-release means on the slave shifter having been actuated to release the head to be set there, and thus the setting of the head has been completed, the reciprocating means on the master shifter operates to advance only the slave shifter by a predetermined

> distance and then the hold-release means on the slave shifter is actuated in the opposite direction to the above-mentioned first actuation to hold the head to be set subsequently.

(Hirakawa, col. 3, ll. 3-12).

29. "Reference numeral 23 designates a master shifter that is slidably fitted about the shafts 15 and also threadedly engaged with the screw shaft 16, numeral 24 designates a slave shifter loosely fitted about the respective shafts 15 and 16." (Hirakawa, col. 5, ll. 3-7).

30. [I]f the piston rod 26 is extended, the slave shifter 24 would advance relative to the master shifter 23 by a predetermined distance represented by B in FIG. 7, while if the piston rod 26 is contracted, the slave shifter 24 would be restored to the position adjacent to the master shifter 23 as represented by double dot chain lines in FIG. 7.

(Hirakawa, col. 5, ll. 12-18).

31. "In FIGS. 5 and 6, reference numeral 27 designates a pair of arms pivotably mounted at the opposite ends of the slave shifter 24." (Hirakawa, col. 5, ll. 23-25).

32. Now the operation of the above-described positioning apparatus will be explained with reference to FIGS. 11 and 14. In case that the heads 3 - 6 and 3' - 6' are to be set at next slitting positions or at next score line positions, a position change signal is transmitted to the positioning apparatus. When this signal is transmitted, the motor 22 is driven in the positive direction, so that the slave shifters 24 and 24' located at the positions shown in FIG. 8 (It is to be noted that in FIG. 11 the positions of the slave shifters 24 and 24' are represented as replaced by the contact plates 29 and 29', respectively.) move towards a storage section (in the rightward direction), and eventually the slave shifter 24 would actuate a limit switch 30

> disposed in front of the entrance of the storage section. The motor 22 is decelerated in response to a deceleration signal then obtained. Subsequently the slave shifter 24 would actuate another limit switch 31. The motor 22 would be stopped in response to a stop signal then obtained, and in this way the return to an origin of the slave shifters 24 and 24' has been completed. By this moment, the masterslave shifters 23-24 and 23'-24' take the relative position represented by solid lines in FIG. 7. Also the arms 27 and 27' take the positions shown in FIG. 5. The origin return positions of the slave shifters 24 and 24' are shown in FIG. 11(E).

(Hirakawa, col. 5, ll. 40-65).

33. "On the other hand, the slave shifters 24 and 24' would move from the position shown in FIG. 11(D) to the position shown in FIG. 11(E). Accordingly, the respective heads 3 - 6 and 3' - 6' are collected in the storage section as shown in FIG. 11(E)." (Hirakawa, col. 5, l. 67-col. 6. l. 3).

34. "The master-slave shifters 23 - 24 and 23' - 24' start movement in the rightward direction in order to search for the head designated by a head number setter 36 in FIG. 14." (Hirakawa, col. 6, ll. 14-17).

35. Subsequently, a setting instruction is transmitted from the digital control panel 33. When this instruction has been transmitted, the heads 3 and 4 and the master-slave shifter 23-24, and the heads 3' and 4' and the master-slave shifter 23'-24', respectively, start movement jointly towards a setting region (in the leftward direction).

(Hirakawa, col. 6, ll. 27-33).

36. "Thereafter, the master-slave shifters 23-24 and 23'-24' start movement in the leftward direction for setting the heads 3 and 3', respectively." (Hirakawa, col. 6, ll. 63-65).

37. "Though the above-described embodiment was such that the respective heads are first collected in the storage section from the set positions shown in FIG. 11(D) (See FIG. 11(E)) and then they are shifted leftwards to be set, they could be directly shifted from the set positions shown in FIG. 11(D) to the next setting positions, respectively." (Hirakawa, col. 7, ll. 34-40).

From our review of Linn we make the following findings of fact:

38. "In such slitter scorers, heads are moved along a shaft to a predetermined position and then are secured to the shaft for rotation therewith." (Linn, col. 1, ll. 12-14).

39. "A means for selectively positioning the heads in predetermined locations along the shaft is provided." (Linn, col. 1, ll. 32-34).

40. "Each shifter supports a finger for coupling a side of the shifter to one of the heads." (Linn, col. 1, ll. 44-45).

41. "It is an object of the invention to provide a slitter with a means for selectively adjusting the heads on a slitter shaft." (Linn, col. 1, ll. 53-55).

42. The means 40 pivots the shaft 20 between an operative position wherein the shaft 20 can be rotatably driven to perform a slitting operation on a web of a paperboard and an adjusting position wherein the heads 24, 26 can be engaged by the pin 38 of the adjusting means 12. The means 40 includes an arm 42.

(Linn, col. 3, ll. 30-35).

43. "The shaft 20 is driven by a separate motor 52." (Linn, col. 3, l. 44)

44. "Assume that the shafts are in the operating position shown in FIG. 2. Shaft 20 will be pivoted clockwise to move it into the position shown in FIG. 3 wherein the heads are in interference with pin 38." (Linn, col. 4, ll. 1-4).

45. Likewise shaft 22 is revolved counterclockwise to bring its heads into interference with pin 38'. The shifter 28 and the shifter 30 move from left to right as shown in FIG. 5A, moving all the heads to the right side after the head locking means has been disengaged.

The shaft 20 then pivots counterclockwise for a sufficient distance to provide clearance between pin 38 and the heads. The shifter 28 moves farther to the right to bring the pin 38 into the position shown in FIG. 5C. The shaft 20 is pivoted clockwise again to bring the heads and pin 38 into the position shown in FIG. 5C. The screw 34 is rotated to move the shifter from right to left to the to the operating position for the first head as shown in FIG. 5D.

(Linn, col. 4, ll. 4-18).

46. If any heads are to be idle, they are moved to the extreme left hand position shown in FIG. 5E. Then, with the heads in the orientation shown in FIG. 5E, the locking means locks the heads to the shaft in their operative positions. The shaft 20 is now ready for the next production run. Simultaneously, the heads on shaft 22 would have been moved likewise.

(Linn, col. 4, ll. 27-34).

From our review of Seki we make the following findings of fact:

47. "The present invention relates to an apparatus for determining positions of a plurality of heads which is employable for a slitter scorer on a corrugate machine." (Seki, col. 1, ll. 7-9).

48. "The apparatus shown in FIG. 5 is an apparatus for determining positions of heads." (Seki, col. 1, ll. 16-17).

49. "By repeating the abovementioned operations, a number of heads 2 are successively located at their predetermined position." (Seki, col. 1, ll. 63-65).

50. To accomplish the above object, there is proposed according to the present invention an apparatus for determining positions of a plurality of heads slidably disposed on a shaft wherein each of the heads is located at a voluntary position on the shaft by repeating the operational steps of displacing the heads as a group of at least more than two heads by pushing them from the rear side with the use of substantially single shifter adapted to move in parallel with the shaft and parting away from the shifter one head at the rearmost end among the moving heads when the shifter reaches a predetermined position, characterized in that the apparatus is provided with means for limiting forward displacement of a head at the foremost end among the heads which are displaced by means of the shifter. When the shifter pushes a group of heads from the rear side and stops its movement, the aforesaid limiting means limits forward movement of the foremost head and thereby inertia movement of the group of heads can be prevented reliably.

(Seki, col. 2, ll. 29-48).

51. In the case where all six heads 2 on the driving side B are displaced to the controlling side A, the DC motor 23 rotates so as to rotate the support shaft 17 via the pulley 21, timing belt 24 and pulley 26. The pawl 16a of the pusher 16 located closest to the frame 4 on the driving side among the plural pushers 16 on the shifter is indexed at the position where it contacts the head 2. On the other hand, the head 2 located on the foremost end on the controlling side A comes in contact with the stopper 19 so that the head 2 is clamped between the stopper 19 and the pusher 16 (see FIG. 3).

Next, when DC motor 13 mounted on the shifter 12 is

> rotated, the pinion 15 is rotated while meshing with the rack 14 whereby the shifter 12 displaces six heads 2 toward the controlling side A with the aid of the pusher 16.

(Seki, col. 4, ll. 5-20).

52. "[A] group of heads 2 tend to overrun under the effect of inertia movement thereof but overruning is inhibited by means of the stopper 19 located forwardly of the foremost head." (Seki, col. 4, ll. 24-27).

53. "By rotating DC motor 13 again, the residual heads 2 are displaced to the next setting position as a group." (Seki, col. 4, ll. 35-37).

PRINCIPLES OF LAW

On appeal, Appellant bears the burden of showing that the Examiner has not established a legally sufficient basis for combining the teachings of the applied prior art. Appellant may sustain this burden by showing that, where the Examiner relies on a combination of disclosures, the Examiner failed to provide sufficient evidence to show that one having ordinary skill in the art would have done what Appellant did. *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 483-84 (1966); *In re Kahn*, 441 F.3d 977, 987-88, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006); *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick, Co.*, 464 F.3d 1356, 1360-61, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006). The mere fact that all the claimed elements or steps appear in the prior art is not per se sufficient to establish that it would have been obvious to combine those elements. *Adams*, 383 U.S. at 52; *Smith Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1420 (Fed. Cir. 1999). In

rejecting claims under 35 U.S.C. § 103(a), 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*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). It is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir.1988). In so doing, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), *viz.*, (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; and (3) the level of ordinary skill in the art. In addition to these factual determinations, the examiner must also provide "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir 2006) (*cited with approval in KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007)). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *See Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. *See also Piasecki*, 745 F.2d at 1472, 223 USPQ at 788. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444; *Piasecki*, 745 F.2d at 1472, 223 USPQ at 788.

ANALYSIS

From our review of Coburn '495 we find from fact 10 that the details of the tool positioner can be found in the related Coburn patent '761. From

fact 13 we find that the master shifter described in Coburn '761 moves from one end of the shaft to the other so that all of the heads are moved to one end of shaft 30. We find from this description that there is a park position at one end of the shaft that the heads are moved to as part of a sequence changing the position of the heads. Thus, we find that the Coburn patents teach the claimed origin position since the heads are moved to the parked position from their original position as part of a sequence of moving the heads to their next position. However, from the sequencing described in the remainder of fact 13, we find that the heads are moved as a group and only the last head is individually moved. Thus, we find no description in the Coburn patents that would have moved the heads individually to the origin position or to their next position.

Turning to Miller, Appellant does not contest the description of Miller but rather asserts that Miller does not make up for the deficiencies of the Coburn patents. From facts 19-22 we find that Miller would have suggested using programs for moving the heads. However, we agree with Appellant that Miller does not make up for the deficiencies of the Coburn patents.

Turning to the Hirakawa patent, we find from fact 24 a description of moving the heads individually or as a group. From fact 26 we find that the heads are moved individually from the origin position to their next position. However, from fact 32 we find that the heads are moved to the storage position together. From facts 32-34 we find that although the heads are moved individually to their next or set positions, there is no description of moving the heads to an origin position individually. Thus, although Hirakawa would have suggested moving the heads individually from the

origin position to the set or next position, the combined teachings and suggestions of the Coburn patents, the Miller patent and the Hirakawa would not have suggested moving the heads individually from their previous position to the origin or parked position. From our review of Linn and Seki, these references fail to make up for the deficiencies of the other references because neither of these references teach or suggest moving the heads individually to the origin or parked position. From all of the above, we hold that the combined teachings of the applied prior art would not have suggested the language of claim 3. It follows that we cannot sustain the rejection of claim 3, or claims 4-6 which depend therefrom.

CONCLUSION OF LAW

On the record before us, Appellant has shown that the applied prior art would not have suggested to an artisan the language of claims 3-6.

DECISION

The Examiner's rejection of claims 3-6 is reversed.

REVERSED

hh

SUGHRUE, MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213