United States District Court,
N.D. Illinois, Eastern Division.

NEOPOST INDUSTRIE B.V., NEOPOST, INC., Neopost S.A., and Hasler, Inc,
Plaintiffs.
v.
PFE INTERNATIONAL, INC. and PFE International Limited,
Defendants.

April 26, 2005.

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CLAIM CONSTRUCTION

RUBEN CASTILLO**, District Judge.**

Plaintiffs Neopost Industric B.V., Neopost, Inc., Neopost S.A., and Hasler, Inc. (collectively "Neopost") brought a patent infringement action against Defendants PFE International, Inc. and PFE International Limited (collectively "PFE"). This claim construction opinion contains our construction of all the disputed terms in U.S. Patent Numbers 5,339,603 and 6,481,704.

LEGAL STANDARDS

We construe a patent's claims by examining the intrinsic evidence of record: the patent's claims, written description, and prosecution history. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). Claim terms should be accorded their ordinary meanings unless the patentee expressly defined them differently or their ordinary meanings would render the claim meaningless or unamenable to construction. FN1 Prima Tek II, L.L.C. v. Polypap, S.A.R.L., 318 F.3d 1143, 1148 (Fed.Cir.2003). The written description can be used to construe claim terms, but cannot limit or expand their scope. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 904 (Fed.Cir.2004); PSC Computer Prods., Inc. v. Foxconn Int'l, Inc., 355 F.3d 1353, 1359 (Fed.Cir.2004). A term is unamenable to construction if it is so ambiguous that "no narrowing construction can properly be adopted." Honeywell Int'l, Inc. v. Int'l Trade Comm'n, 341 F.3d 1332, 1338-39 (Fed.Cir.2003) (quoting Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375 (Fed.Cir.2001)).

FN1. "Dictionaries are always available to the court to aid in the task of determining meanings that would have been attributed by those of skill in the relevant art to any disputed terms used by the inventor in the claims." Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed.Cir.2002).

A means-plus-function limitation describes an element functionally without describing the structure that performs the claimed function. 35 U.S.C. s. 112 para. 6; Apex Inc. v. Raritan Computer, Inc., 325 F.3d

1364, 1371 (Fed.Cir.2003). A term that uses the word "means" is presumed to be a means-plus-function limitation while a term that does not use this word is presumed not to be a means-plus-function limitation. *Id*. A party can rebut the presumption by proving by a preponderance of the evidence that the claim either recites sufficient structure to describe the limitation (when the term uses the word "means") or fails to recite sufficient structure to describe the limitation (when the term docs not use the word "means"). *Id.; see also* Personalized Media Communications, LLC v. Int'l Trade Comm. 'n, 161 F.3d 696, 704 (Fed.Cir.1998).

Means-plus-function limitations are construed in the following manner. We first identify the function disclosed in the patent's claims. Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed.Cir.2002). We then identify the structures disclosed in the written description that correspond to the identified function. *Id.; see also* Versa Corp. v. Ag-Bag Int'l Ltd., 392 F.3d 1325, 1329 (Fed.Cir.2004). The limitation is "sharply limited" to the structures disclosed in the written description and their equivalents. J & M Corp. v. Harley-Davidson, Inc., 269 F.3d 1360, 1367 (Fed.Cir.2001). The Federal Circuit, in Medical Instrumentation and Diagnostics Corp. v. Elektra AB, 344 F.3d 1205, 1211 (Fed.Cir.2003) (internal citations and quotations omitted), explained why means-plus-function limitations are so "sharply limited:"

The duty of a patentee to clearly link or associate structure with the claimed function is the quid pro quo for allowing the patentee to express the claim [as a means-plus-function limitation. Means-plus-function limitations were] intended to allow the use of means expressions in patent claims without requiring the patentee to recite in the claims all possible structures that could be used as means in the claimed apparatus. However, the price that must be paid for use of that convenience is limitation of the claim to the means specified in the written description and equivalents thereof. If the [written description] is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee has not paid the price but is rather attempting to claim in functional terms unbounded by any reference to structure in the [written description]. Such is impermissible under the statute.

ANALYSIS

I. U.S. Patent No. 5,339,603

A. Claim 1

The parties dispute four terms in claim 1. FN2 Claim 1, with the disputed terms indicated by bold and italics, claims:

FN2. Neopost identified five disputed terms in its opening brief, (R. 22, Pls.' Mem, at 4-5), but PFE conceded that there is no material dispute with respect to one of those terms, (R. 32, Def.'s Resp., Ex. A, Agreed Claim Construction Chart). This Court adopts Neopost's proposed claim construction, identified in Exhibit A of PFE's responsive brief, with respect to that term, PFE made similar concessions with respect to other terms is in the remaining claims, so this Court also adopts Neopost's proposed claim construction, also identified in Exhibit A of PFE's responsive brief, of those additional terms. (*See* id.)

A method for setting a folding station included in an apparatus for preparing items to be mailed, said apparatus comprising a document-supply station, an envelope-inserter station, ***transport means interconnecting said stations*** and ***setting means for setting at least the folding machine,*** said method comprising the steps of:
inputting data into said setting means for setting the fold height of a fold to be formed in at least one document, said data representing at least the height of the envelope intended as a package for said at least one documents; and

determining and setting said fold height by the setting means, at least partly depending on the inputted data representing the height of the envelope.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, Claim 1.)

1. Transport Means Interconnecting Said Stations

The parties dispute whether the term "transport means interconnecting said stations" is a means-plus-function limitation. Plaintiffs assert that it is not a means-plus-function limitation because it does not describe a function. (R. 43, Pls.' Reply at 4.) We disagree. First, the term includes the word "means," so we must presume that it is a means-plus-function limitation. Apex, 325 F.3d at 1371. Second, the terra recites the function of "interconnecting said stations." FN3 Neopost has not addressed this presumption, nor has it submitted evidence sufficient to rebut it. Thus, we must construe this term as a means-plus-function limitation.

FN3. The parties agree that "said stations" are the folding station, document-supply station, and envelope-inserter station. *Id*. at 4 n. 3.

To construe this limitation, we must review the written description to identify the structure that corresponds to the function disclosed in the claim. The relevant section of the written description states:

One example of an apparatus according to the invention for preparing items to be mailed is shown in FIG. 1. The apparatus shown comprises two document-supply stations 1 and 2 arranged along a transport track 3. A folding station 4 which can be set for determining a fold height of at least one fold to be formed in at least one document supplied from one of the document-supply stations 1, 2 is arranged downstream of the second supply station 2. Connected to the folding station 4 is **a** transport unit 5 having an envelope inserter station 6 connected thereto. From the supply stations 1 and 2, sets of documents can be supplied. The documents can be folded in the folding station 4, in such a manner that they can be placed in the corresponding envelopes in the inserter station 6.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 2, line 61-col. 3, line 7.) The written description describes the structure that interconnects the three stations as "a transport track" and "a transport unit." We therefore construe "transport means interconnecting said stations" as: (1) a mechanism or mechanisms for conveying documents from the document-supply station to the folding station and from the folding station to the envelope-inserter station and (2) any equivalent structures for conveying documents from the document-supply station to the folding station and from the folding station to the envelope-inserter station.FN4

FN4. We included the equivalent structures within our claim construction because literal infringement of means-plus-function limitations includes structural equivalents. Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l., Inc., 389 F.3d 1370, 1378 (Fed.Cir.2004).

2. Setting Means for Setting at Least the Folding Machine

The parties dispute whether "setting means for setting at least the folding machine" is a means-plus-function limitation. Once again, Neopost asserts that this term is not a means-plus-function limitation, but fails to address or rebut the presumption that it is a means-plus-function limitation. (R. 43, Pls.' Reply at 4.) The term recites the function of "setting at least the folding machine." The relevant sections of the written description state:

The wall element 13, the slide 14, the rail 15 form the setting means of the folding station, which are

coupled to input means formed by the indicator 16 and the scale 17 for inputting data representing the height of an envelope to be processed.

* * *

According to a preferred embodiment of the invention, the setting means further comprise data processing means having stored therein a folding program for setting the folding station ...

* * *

When using the present invention in a folding machine as shown in FIGS. 2 and 3, the setting means preferably comprise data processing means for determining the number of folds to be provided in a document or stack of documents and the fold heights thereof, depending on the inputted height of an envelope to be processed and a document or stack of documents to be inserted therein, and for determining the control commands for the deflection means and the folding blades as well as the rotations of the associated feed rollers after the passage of a leading edge of a document, before the associated folding blade must be operated for bending the document further and urging it between the folding rollers.
(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 3, lines 46-50, 62-65, col. 4 line 66-col. 5, line 11.)
The written description discloses two corresponding structures: (1) the wall element, the slide, and the rail with or without a data processing means and (2) a data processing means. Thus, we construe "setting means for setting at least the folding machine" as: (1) the wall element, the slide, and the rail with or without a data processing means for setting at least the folding machine; (2) a data processing means for setting at least the folding machine; and (3) any equivalent structures for setting at least the folding machine.
Neopost asserts that this means-plus-function limitation is not limited to the structures disclosed in the written description. Neopost contends that the written description explicitly states that the disclosed structures are only examples. (*See* R. 43, Pls.' Reply at 5.) This type of general, catch-all statement cannot eviscerate the requirement that a means-plus-function limitation is "sharply limited" to the structures disclosed in the written description and their equivalents. J & M, 269 F.3d at 1367. Accepting Neopost's argument would impermissibly entitle Neopost to claims that are "unbounded by any reference to structure" in the written description. *See* Med. Instrumentation & Diagnostics, 344 F.3d at 1211. The only undisclosed structures that can be included within the construction of a means-plus-function limitation, as discussed above, are structural equivalents. *See* Frank's Casing Crew & Rental Tools, 389 F.3d at 1378.FN5

FN5. The parties also dispute the meaning of the two identified steps. (R. 32, Def.'s Resp. at 5-6; R. 43, Pls.' Reply at 5-6.) We fail to comprehend the materiality of their dispute, but find that this dispute is actually a tertiary dispute over the construction of the setting means. (*See id.*) Furthermore, the parties do not dispute the meaning of any of the words used in these steps. (*Id.*) Accordingly, we find that these steps speak for themselves and need not be construed.

Neopost also requests that this Court consult U.S. Patent No. 4,917,662, which is incorporated into this patent by reference. We cannot consider the structures disclosed in that patent when construing means-plus-function limitations because corresponding structures must be disclosed in the patent's written description. *See* Atmel Corp. v. information Storage Devices, Inc., 198 F.3d 1374, 1382 (Fed.Cir.1995).

B. Claim 4

The parties dispute one phrase in claim 4. Claim 4, with the disputed phrase indicated by bold and italics, claims:

A method as claimed in claim 3, wherein said apparatus comprises ***sensors arranged in the apparatus for preparing items to be mailed and connected to the setting means, and said method further comprises the step of scanning, using said sensors, the height*** of the at least one document to be packaged;

generating a signal that is dependent upon the outcome of the step of scanning and represents the height of the at least one document; and

inputting said signal to the setting means.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, Claim 4.) PFE asserts that this phrase is a means-plus-function limitation. (R. 32, Def.'s Resp. at 6.) This phrase does not include the word "means"-except when referring to the "setting means," so PFE must rebut the presumption that the phrase is not a means-plus-function limitation. PFE has not addressed or attempted to rebut this presumption, so we do not construe this phrase as a means-plus-function limitation.FN6 Having found that this claim does not include any means-plus-function limitations, we find that the claim speaks for itself so needs no construction.

FN6. PFE asserts that the function of this limitation is "to set the folding machine to determine a fold height of a fold to be formed in a document." Id. This function is only disclosed in the written description. (*See* R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 2, lines 17-19.) A means-plus-function limitation's function must be disclosed in the patent's claims. Cardiac Pacemakers, 296 F.3d at 1113. Furthemore, this dispute again appears to be a dispute over the construction of the setting means. (*See* R. 32, Def.'s Resp. at 6; R. 43, Pls.' Reply at 6.)

C. Claim 6

Even though the parties only identify two terms in claim 6 that need construction, their briefs focus on three terms. Claim 6, with the disputed terms in hold and italics, claims:

A method as claimed in claim 4, further comprising the steps of:

rolling a scanning roller over the ***at least one document*** from a leading to a trailing end thereof; and

scanning and ***registering the rotation*** of the scanning roller for determining the height of the at least one document.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, Claim 6.) The parties do not dispute the ordinary meaning of the language "rolling a scanning roller" or "registering the rotation." We find that these terms speak for themselves, so do not require construction.

We must, however, address the term "at least one document." Neopost asserts that the term "at least one document" can refer to an envelope, (R. 43, Pls' Reply at 6), and PEE asserts that it refers to claim 4's "at least one document to be packaged," (R. 32, Def.'s Resp. at 6). We agree with PFE. In claim 4 the term "at least one document" refers to the term "at least one document to be packaged." Claim 6 is dependent of claim 4, so the term "at least one document" in claim 6 should also be construed as "at least one document to be packaged."

Neopost asserts that the written description establishes that the term "at least one document" refers to an envelope because it states that:

During the passage of an envelope, document or stack of documents, the scanning roller is rolled over the envelope, the document or the stack of documents from leading to trailing end thereof while the rotation of the scanning roller is scanned and registered.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 5, lines 54-58.) Neopost's argument is unpersuasive because the written description cannot expand a claim's scope. PSC Computer, 355 F.3d at 1359. Additionally, claim *5* specifically refers to "scanning, using said sensors, the height of an envelope to be processed." (R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, claim 5.) In this way, claim 5, which is

very similar to claim 4, indicates that "documents to be packaged" should not be construed lo include "envelopes to be processed." *See Versa Corp.,* 392 F.3d 1329-30 (discussing the doctrine of claim differentiation).

D. Claim 22

The parties dispute two terms in claim 22. Claim 22, with the disputed terms indicated by bold and italics, claims:

Apparatus as claimed in claim **21,** wherein:

the setting means further comprises data processing means having stored therein a folding program for setting the folding station,

the input means are connected to said data processing means for inputting said data as a parameter value; and

the folding program includes;

at least one input parameter for storing said parameter value,

an output parameter for setting the folding machine, and

an algorithm for assigning a parameter value to the output parameter, ***depending on the parameter value assigned to said input parameter.***

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5339,603, claim 22.) PFE advances two narrow constructions of these terms, but they are both based entirely on an unrelated portion of the written description. (R. 32, Def.'s Resp. at 6-7 (citing R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 6, line 51-col. 8 linc 40).) The written description cannot limit a claim's scope. Liebel-Flarsheim, 358 F.3d at 904. Additionally, the proposed narrowing limitations are provided in claims 28 and 29. *See Versa Corp.,* 392 F.3d 1329-30 (discussing the doctrine of claim differentiation). The parties do not dispute the ordinary meaning of either term, so these terms speak for themselves.

E. Claim 24

The parties dispute one term in claim 24. Claim 24, with the disputed term indicated by bold and italics, claims:

Apparatus as claimed in claim **22,** further comprising *measuring instruments* for determining a parameter value representing the height of an envelope to be processed, said measuring instruments being coupled to the input means for inputting said parameter value representing the height of the envelope.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, claim 24.) Even though this term does not include the word "means," we construe it as a means-plus-function limitation because the claim does not identify the measuring instruments' structure. Personalized Media Communications, 161 F.3d at 704. Furthermore, there are many different types of instruments that can perform the function of measuring, so this term does not have a generally understood meaning.FN7 *See* Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed.Cir.1996) (stating that generally understood devices that take their name from the function they perform, such as filter, screwdriver, grasper, etc., arc not means-plus-function limitations).

FN7. Neopost relies on S3 Incorporated v. Nvidia Corp., 259 F.3d 1364, 1366 (Fed.Cir.2001) to argue that it

does not need to disclose the measuring instruments' structure because a person experienced in the field of invention would understand the term's scope. The Federal Circuit found in *S3* that the written description did not need to describe the structure of a selector because a selector is a "standard electronic component whose structure is well known." Id. at 1370. Unlike a selector, the structure of measuring instruments is not well-known. The generality of this term is proved by the two very different structures described in the written description.

Claim 24 states that the function of the measuring instruments is to determine a parameter value representing the height of an envelope to be processed. (R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603. claim 24.) The relevant sections of the written description state:

A reliable, accurate setting of the height of an envelope to be processed or a document or stack of documents to be packed therein can be obtained if the measuring instruments comprise a scanning roller which, in the area of a transport track, is in engagement with a surface, associated data processing means, a rotation sensor which can supply the associated data processing means a signal representing the path which the scanning roller has traversed over the envelope, a document or stack of documents which are passed along the scanning roller in the direction of their height.

* * *

The measuring instrument may for instance comprise a light sensitive cell **30** and a light source **31.** The stop **28** is movable along the track **7** and the distance between the stop **28** and the light-sensitive cell **30** is detected. The distance from the stop **18** to the light-sensitive cell 30 at the time when the light beam is interrupted provides a measure for the height of the stack of documents **29.**
(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 5, lines 43-53, col. 6, lines 10-17.) The written description discloses two corresponding structures: (1) a scanning roller that-in the area of the transport trackis in engagement with a surface and a rotation sensor and (2) a light sensitive cell, a light source, and a movable stop. Thus, we construe the term "measuring instruments" as: (1) a scanning roller that-in the area of the transport track-is in engagement with a surface and a rotation sensor for determining a parameter value representing the height of an envelope to be processed; (2) a light sensitive cell, a light source, and a movable stop for determining a parameter value representing the height of an envelope to be processed; and (3) any equivalent structures for determining a parameter value representing the height of an envelope to be processed.

F. Claim 31

The parties dispute four terms in claim 31, Claim 31. with the disputed term indicated by bold and italics, claims:

A folding station for preparing items to be mailed, and adapted to fold documents of various sizes to be inserted into envelopes of various sizes, said folding station comprising:

means for folding at least one document to be inserted into an envelope in accordance with a selected fold height;

means for inputting data representing the height of the envelope;

means for determining the fold height in accordance with said inputted data; and

means for setting the fold height in accordance with the determined fold height.

(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, claim 31.) The parties agree that these terms are

means-plus-function limitations and agree on the function of these terms: (1) the function of the "means for folding at least one document" is folding; (2) the function of the "means for inputting data" is inputting data; (3) the function of the "means for determining the fold height" is determining the fold height of a document; and (4) the function of the "means for setting the fold height" is setting the fold height of a document.

The parties disagree, however, about the structures that correspond to these functions. Neopost asserts that the structures disclosed in the written description (which it does not identify) are only examples of corresponding structures. (R. 22, Pls.' Mem. at 9.) We have already addressed and rejected this argument. Means-plus-function limitations are limited to the various structures disclosed in the written description and their equivalents. Versa Corp., 392 F.3d at 1329.

1. Means for Folding at Least One Document

The relevant sections of the written description state:

Such a folding machine comprises a feed track **7** along which a finger **8** can be moved for supplying the documents to be folded. The feed track **7** terminates in front of a passage **9** giving access to a drum-shaped compartment **10.** The drum-shaped compartment **10** has a circumference such that a document fed into it will roll up. By moving a pressure member **11** through the compartment **10** to a stop surface **12,** a rolled-up document or set of documents can be flattened and thereby folded.

* * *

The folding machine shown in FIGS. **2** and **3** comprises two pairs of rollers arranged in succession, the rollers **18, 19** and **20, 21** being arranged opposite each other on either side of a transport track **22.** Arranged between the pairs of rollers is a deflection member **23** for guiding a leading portion of a document **24** to be folded out of the transport track **22** and between two guide members **25** and **26.** When the leading portion has been passed from the transport track **22** and between the guide members **25** and **26** over a certain distance, for instance as shown in FIG. **2,** the deflection member **23** is removed from the transport track and the document is bent farther by a folding blade **27** and forced between the second pair of rollers **20** and **21.** The rollers **20, 21** form a fold in the portion that has been bent further.

* * *

For forming a second fold, there may for instance be provided a third pair of rollers with associated deflection and guide means as well as an associated folding blade, while the rollers of the second pair of rollers **20, 21** simultaneously function as feed rollers for the third pair of rollers.
(R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 3, lines 12-21, col. 4 lines 32-45, 56-61.) The written description discloses the following corresponding structures: (1) a feed track, along which a finger can be moved, that feeds documents into a drum-shaped compartment, through which a pressure member can be moved to a stop surface and (2) at least two pairs of rollers arranged in succession on opposite sides of a transport track, at least one deflection member, at least two guide members, and at least one folding blade. Thus, we construe this means-plus-function limitation as: (1) a feed track, along which a linger can be moved, that feeds documents int o a drum-shaped compartment, through which a pressure member can be moved to a stop surface for folding; (2) at least two pairs of rollers arranged in succession on opposite sides of a transport track, at least one deflection member, at least two guide members, and at least one folding blade for folding; and (3) any equivalent structures for folding.

2. Means for Inputting Data

The only corresponding structure disclosed in the written description is an "input means formed by the indicator **16** and the scale **17** for inputting data representing the height of the envelope to be processed." (R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 3, lines 48-50.) The written description uses the term "input means" in the following additional context:

For determining the height of a document to be processed, the apparatus according to the invention for preparing items to be mailed preferably comprises measuring instruments for determining the parameter value representing the height of a document to be processed, these measuring instruments being coupled with the input means for inputting this parameter value.

(Id., col 5. lines 29-35.) While it appears that the disclosed corresponding structure cannot perform this function, the written description docs not disclose any alternate corresponding structures. The patentee must clearly link a structure to the claimed function. *See Med. Instrumentation & Diagnostics,* 334 F.3d at 1211. Therefore, we construe this means-plus-function limitation as: (1) an indicator and a scale for inputting data and (2) any equivalent structures for inputting data.

3. Means for Determining the Fold Height and Means for Setting the Fold Height

Neopost did not specifically identify any structures that correspond to these means-plus-function limitations. (R. 22, Pls.' Mem. at 9.) PFE asserts that the structure that corresponds to these two means-plus-function limitation is the setting means' structure because the written description states that "[t]he setting means, **13, 14, 15** are adapted for determining and setting the fold height of a fold to be formed in a document ...." (R. 22, Pls.' Mem., Ex. 1, U.S. Patent No. 5,339,603, col. 3. lines 54-56.) We agree that the term "means for setting the fold height" and the term "setting means for setting at least the folding machine" which we have already construed in claim 1, share the same corresponding structure. We also agree that the term "means for determining the fold height" shares the same structure as the "means for setting the fold height." The patent repeatedly states that the setting means determines the fold height. (*See* id., col. 1, lines 20-22, col. 2, lines 3-4, 25-26, **col.** 3, lines 54-56, col. 4, line 67-col. 5., line 3, col. 6. lines 41-47.) Thus, we construe "means for setting the fold height" as: (1) the wall element, the slide, and the rail with or without a data processing means for setting the fold height; (2) a data processing means for setting the fold height; and (3) any equivalent structures for setting the fold height. And we construe "means for determining the fold height" as: (1) the wall element, the slide, and the rail with or without a data processing means for determining the fold height; (2) a data processing means for determining the fold height; and (3) any equivalent structures for determining the fold height.

II. U.S. Patent No. 6,481,704FN8

FN8. The parties dispute the meaning of claims 2 and 3. The briefing with respect to the construction of these claims left a lot to be desired. (R. 22, Pl.'s Mem. at 12-13, R. 32, Def.'s Resp. at 11; R. 43, Pls.' Reply at 10-11.) This Court is unable to ascertain the exact nature of the dispute, The parties do not dispute the ordinary meaning of any words used in these claims and propose remarkably similar claim constructions. (Id.) Accordingly, we find that these claims speak for themselves and need not be construed.

A. Claim 1

The parties dispute various terms in claim 1, but their briefing indicates that only the terms indicated below by bold and italics require construction. Claim 1 claims:

A method for determining ***a setting condition*** of an apparatus for assembling mail items from mail components, wherein the apparatus includes a number of feeder stations, the method comprising

detecting, in ***a setting phase,*** in which of the feeder stations the mail components are present,

in response to detecting during said setting phase the presence of at least one mail component in at least one of said feeder stations, in the setting condition determining by the apparatus, said at least one of said feeder stations is in ***an operating condition,*** and

in response to not detecting during said setting phase the presence of at least one of the mail components in another of said feeder stations, said another of said feeder stations is in ***a non-operating condition.***

(R. 22, Pls.' Mem., Ex. 2, U.S. Patent No. 6,481,704, claim 1.) We construe the term "a setting condition" as "the condition that the apparatus is in based upon the determination of which feeder stations contain a mail component." We construe the term "a setting phase" as "the phase when the apparatus determines the setting condition." We construe the term "an operating condition" as "the state of a feeder station when a mail component is detected in the feeder station." We construe the term "a non-operating condition" as "the state of a feeder station when a mail component is not detected in the feeder station." FN9

FN9. The parties dispute the meaning of the term "waiting position," but this term is only used in the written description. (R. 32, Def.'s Resp. at 9-10; R. 43, Pls.' Reply at 9-10.) Therefore, we have not construed it. Additionally, PFE asserts that claim 1 requires that one feeder station is in a non-operating condition. (Id.) We disagree. Claim 1 only requires that the method for determining the setting condition comprise the detection of which feeder stations contain mail components.

B. Claim 6

The parties dispute one term in claim 6. Claim 6, with the disputed term indicated in hold and italics, claims:

An apparatus for assembling mail items from mail components, comprising:

a number of feeder stations for feeding mail components to be processed into mail items,

means for detecting actual data regarding the m ail component is loaded in to the feeder stations of the apparatus,

a control unit for determining, in response to said actual data, at least one setting of the apparatus,

detection means coupled with said control unit for detecting in a setting phase in which of said feeder stations the mail components arc present,

wherein in said setting condition of the apparatus at least one of said feeder stations is in a operating condition in response to the detected presence of at least one mail component in said at least one of said feeder stations, and,

in response to a non-detection of the presence of at least one of the mail components in another of said feeder stations, said another of said feeder stations is in a non-operating condition.

(R. 22, Pls. Mem., Ex. 2, U.S. Patent No. 6,481,704, claim 6.) The function of this limitation is detecting actual data regarding the mail components loaded into the feeder stations of the apparatus. Once again, Neopost incorrectly asserts that this means-plus-function limitation is not limited to the structures disclosed in the written description. (R. 43, Pls.' Reply at 11-12.) Means-plus-function limitations are "sharply limited" to the structures disclosed in the written description and their equivalents. J & M, 269 F.3d at 1367. The relevant portions of the written description state:

For scanning fed documents downstream of the feeder stations **1, 2** and upstream of the aligning station **16,** scanning means for scanning a passing document to be gathered are arranged. According to the present exemplary embodiment, the scanning means are designed as a light source 63 and a photosensitive cell 64. By also scanning the rotation of one of the transport rollers **27-30,** for instance the length of a passing

document can be measured.

The above means **27-30, 63** and **64** for measuring the length of a passing document to be gathered can be connected with a data processor for inputting and storing a signal corresponding to the measured length in that data processor.

* * *

The scanning means can also comprise a scanner for scanning indicia present on the documents, which scanner is connected with a data processor.

* * *

The scanning means can further comprise a thickness meter for measuring the thickness of a passing document to be gathered, which thickness meter is connected with a data processor for inputting a signal corresponding to the measured thickness into the data processor.

(R. 22, Pls.' Mem., Ex. 2, U.S. Patent No. 6,481,704, col. 4, lines 15-27, 32-34, 42-46.) The written description discloses the following corresponding structures: (1) a light source and photosensitive cell that can be connected to a data processor; (2) a scanning roller that can be connected to a data processor; (3) a scanner for scanning indicia present on the documents connected to a data processor; and (4) a thickness meter connected to a data processor.

Therefore, we construe this means-plus-function limitation as: (1) a light source and photosensitive cell that can be connected to a data processor for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; (2) a scanning roller that can be connected to a data processor for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; (3) a scanner for scanning indicia present on the documents connected to a data processor for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; (4) a thickness meter connected to a data processor for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; and (5) any equivalent structures for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus.

C. Claim 7

The parties dispute one terra in claim 7. Claim 7, with the disputed term indicated in bold and italics, claims:

An apparatus according to claim **6,** further comprising:

a detector for detecting mail components in a position downstream of at least one of said feeder stations, which detector is coupled with said control unit, the control unit being arranged for controlling one of said feeder stations for feeding a mail component and subsequently detecting downstream of said one controlled feeder station whether a mail component passes, and generating mail component present signal if subsequently a detection signal is received from said detector and generating a mail component absent signal if subsequently within ***a particular time interval*** no detection signal is received from said detector.

(R. 22, Pls.' Mem., Ex. 2, U.S. Patent No. 6,481,704, claim 7.) PFE asserts that this term is unamenable to construction. A term is only unamenable to construction if it is so ambiguous that "no narrowing construction can properly be adopted." Honeywell, 341 F.3d at 1338-39. The meaning of a "particular time period" is not ambiguous. Even though the written description uses one second as an example of a particular time period, claim terms (not means-plus-function limitations) are not limited to the examples provided in the written description. We find that this term speaks for itself so does not require construction.FN10

FN10. The parties also dispute whether this claim is limited to the "start up of the system." (R. 32, Def.'s

Resp. at 12-13, R. 43, Pls.' Reply at 12.) We fail to comprehend how a claim claiming an apparatus can be limited to a specific lime period. The parties also made an analogous argument with respect to claim 3, and we similarly failed to comprehend the exact nature of the dispute. (R. 32, Def.'s Resp. at 11; R. 43, Pls.' Reply at 11.)

D. Claim 8

The parties dispute one term in claim S. Claim 8, with the disputed term indicated by bold and italics, claims:

An apparatus according to claim 6. further comprising:

signaling means for signaling in human-perceptible form which of said feeder stations are in the operating condition.

(R 22, Pls.' Mem., Ex. 2, U.S. Patent No. 6,481,704, claim 8.) This term is a means-plus-function limitation. The function of this limitation is signaling in human-perceptible form which of said feeder stations are in the operating condition. The relevant portion of the written description provides:

In the operating phase of the system, signals indicating that a specimen of the feeder stations **1** is empty are generated if absence of a mail component in a specimen of the feeder stations is detected in combination with the respective specimen of the feeder stations **1** being in operating condition. Thus, 'empty' reports regarding feeder stations **1** which have been set out of operations are prevented. For generating 'empty' signals, the system comprises a buzzer 66 which produces a signal that can also be perceived if the attention of persons present in the neighborhood of the system is not focused on the system.

* * *

In order to signal to the operator which of the feeder stations **1, 2, 34, 35** are in operating condition, the system comprises signaling means in the form of a display **67** for signaling in a human-perceptible form which of the feeder stations **1, 2, 34, 35** are in operating condition. It is also possible to provide the feeder stations **1** with indicators, so that at start-up it can be very easily verified whether all feeder stations with filled magazines are in operating condition.
(Id., col, 7, lines 24-34, 46-54.) The written description discloses the corresponding structure of a "display." The written description's drawing depicts the display as a computer monitor or screen. The ordinary meaning of display, according to Merriam-Webster's Online Dictionary, is "an electronic device (as a cathode-ray tube) that temporarily presents information in visual form." Merriam-Webster's Online Dictionary, *at* http://www.m-w.com (last visited April 4, 2005). We therefore construe this means-plus-function limitation as: an electronic display that temporarily presents information in visual form for signaling in human-perceptible form which of said feeder stations are in the operating condition and any equivalent structures for signaling in human-perceptible form which of said feeder stations are in the operating condition.
The written description also discloses "indicators" and "buzzers," hut does not link them to the "signaling means." Indicator is far too generic of a term to constitute a structure, and is not identified as an alternative structure. Rather it is used to identify an alternative location for the signaling means: on the feeder station. Buzzer, while specific enough to constitute a structure, is only linked to the function of determining whether a feeder station that is in the operating condition is empty; buzzer is not linked to the function of signaling which of said feeder stations are in the operating condition.

CONCLUSION

As noted throughout this opinion, this Court found that several disputed terms did not require construction

either because the claims spoke for themselves or because we could not ascertain the exact nature of the parties' dispute. We nonetheless endeavored to construe all disputed terms to enable this case to proceed expeditiously to a judgment. Appendix 1 contains a summary of our construction. In light of this Court's claim construction, the parties are strongly urged to resume meaningful settlement negotiations.

Appendix 1

Patent No.	Claim No.	Claim Term	Court's Claim Construction
5,339,603	1	transport means interconnecting said stations	(1) a mechanism or mechanisms for conveying documents from the document-supply station to the folding station and from the folding station to the envelope-inserter station and (2) any equivalent structures for conveying documents from the document-supply station to the folding station and from the folding station to the envelope-inserter station
5,339,003	1	setting means for setting at least the folding machine	(1) the wall element, the slide, and the rail with or without a data processing means for setting at least the folding machine; (2) a data processing means for setting at least the folding machine, and (3) any equivalent structures for setting at least the folding machine
5.339,603	6	at least one document	at least one document to be packaged
5,339,603	24	measuring instruments	(1) a scanning roller that-in the area of the transport track-is in engagement with a surface and a rotation sensor for determining a parameter value representing the height of an envelope to be processed; (2) a light sensitive cell, a light source, and a movable stop for determining a parameter value representing the height of an envelope to be processed; and (3) any equivalent structures for determining a parameter value representing the height of an envelope to be processed
5,339,603	31	means for folding	(1) a feed track, along which a finger can be moved, that feeds documents into a drum-shaped compartment, through which a pressure member can be moved to a stop surface for folding; (2) at least two pairs of rollers arranged in succession on opposite sides of a transport track, at least one deflection member, at least two guide members, and at least one folding blade for folding; and (3) any equivalent structures for folding
5,339,603	31	means for inputting data	(1) an indicator and a scale for inputting data and (2) any equivalent structures for inputting data
5,339,603	31	means for setting the fold height	(1) the wall element, the slide, and the rail with or without a data processing means for setting the fold height; (2) a data processing means for setting the fold height; and (3) any equivalent structures for setting the fold height
5,339,603	31	means for determining the fold height	(1) the wall element, the slide, and the rail with or without a data processing means for determining the fold height; (2) a data processing means for determining the fold height; and (3) any equivalent structures for determining the fold height
6,481,701	1	a setting condition	the condition that the apparatus i s in based upon the determination of which feeder stations contain a mail component
6,481,701	1	a setting phase	the phase when the apparatus determine s the setting condition
6,481,701	1	an operating condition	the state of a feeder station when a mail component is detected in the feeder station

6,481,701	1	a non-operating condition	the state of a feeder statio n when a mail component is not detected in the feeder station
6,481,701	6	means for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus	(1) a light source and photosensitive cell that can be connected to a data processor for detecting actual data regarding the mail components loaded into the Feeder stations of the apparatus; (2) a scanning roller that can he connected to a data processor For detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; (3) a scanner for scanning indicia present on the documents connected to a data processor for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; (4) a thickness meter connected to a data processor for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus; and (5) any equivalent structures for detecting actual data regarding the mail components loaded into the feeder stations of the apparatus
6,481,701	8	signaling means for signaling in human-perceptible form which of said feeder stations arc in the operating condition	an electronic display that temporarily presents information in visual form for signaling in human-perceptible form which of said feeder stations arc in the operating condition and any equivalent structures for signaling in human-perceptible form which of said feeder stations are in the operating condition

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