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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PITNEY BOWES, INC.

Appeal 2007-2637
Application 10/741,269
Technology Center 1700

Decided: July 10, 2007

Before JAMESON LEE, RICHARD TORCZON, and ROMULO H. DELMENDO, *Administrative Patent Judges*.

TORCZON, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal relates to methods for creating folded, scented inserts for mail items created in a high-speed mail-processing system. The examiner rejected claims 1 and 2 under 35 U.S.C. 103 as having been obvious. The appellant (Pitney Bowes) seeks review of the rejection. We affirm.

First, the claim scope and meaning of contested limitations of claims must be established.¹ Next, the scope and content of the prior art must be

¹ *Abbott Labs. v. Andrx Pharm., Inc.*, 452 F.3d 1331, 1335-36, 79 USPQ2d 1321, 1324 (Fed. Cir. 2006) (scope and meaning); *Aero Prods. Int'l, Inc. v.*

determined, the differences between the prior art and the claims ascertained, and the ordinary level of skill in the art resolved. Objective evidence of the circumstances surrounding the origin of the claimed subject matter (so-called secondary considerations) may also be relevant. Such secondary considerations guard against the employment of impermissible hindsight.²

CLAIMS

Claim 1³ defines the invention as follows—

1. A method for creating scented advertisement inserts from rectangular sheets for inclusion as inserts into mail pieces, the sheets having left, right, top and bottom edges, the method comprising:

applying a scented adhesion to a left strip along the left side of the sheets and to a right strip along the right side of the sheets, the left strip and right strip being substantially along an entire length of the left side and the right side;

making a first fold along the left side of the sheets parallel to the left edge, the first fold covering the left strip having the scented adhesion, the first fold being substantially along the entire length of the left side;

making a second fold along the right side of the sheets parallel to the right edge, the second fold covering the right strip having the scented adhesion, the second fold being substantially along the entire length of the right side;

Intex Rec. Corp., 466 F.3d 1000, 1012 n.6, 80 USPQ2d 1481, 1488 n.6 (Fed. Cir. 2006) (appropriate to focus on disputed limitations).

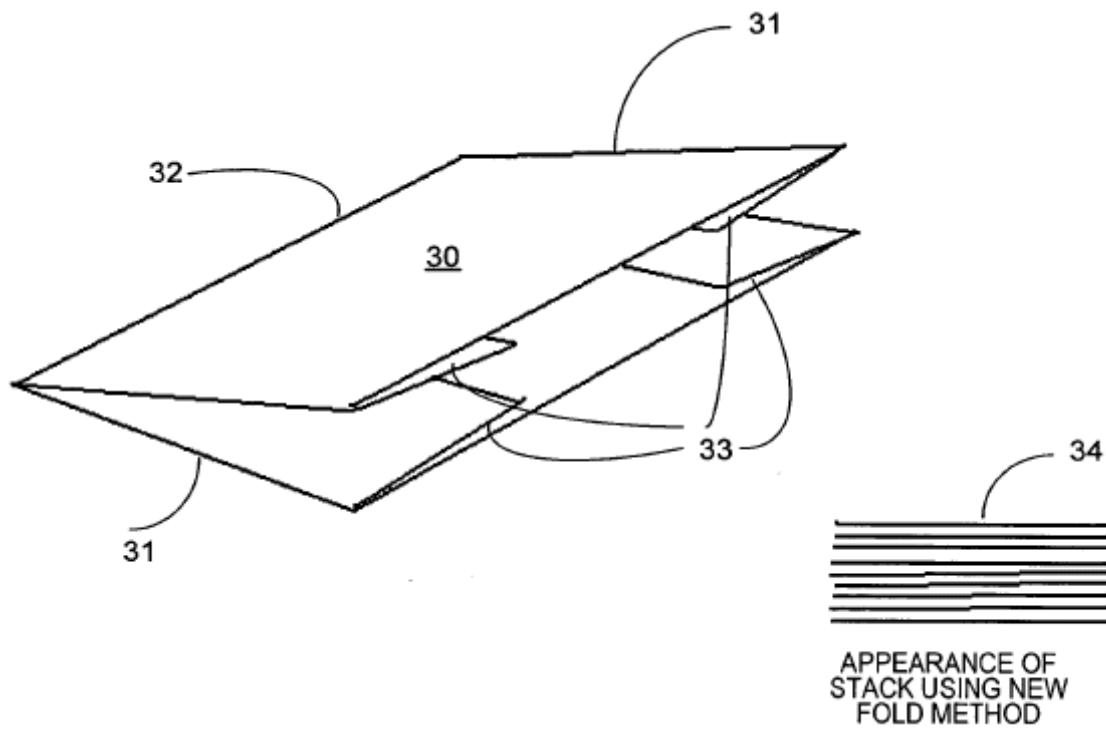
² *Graham v. John Deere Co.*, 383 U.S. 1, 17, 36 (1966), cited with approval in *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385 (2007). The record on appeal does not contain objective evidence of secondary considerations.

³ All claim language is reproduced from the claim appendix to the appeal brief.

after making the first and second folds, folding the sheets substantially in half in a direction orthogonal to the first and second folds and substantially bisecting the first and second folds; and

stacking the sheets in preparation for feeding as inserts into mail pieces.

An example of the claimed folding method is illustrated in Pitney Bowes' FIG. 3:



Pitney Bowes' FIG. 3 shows a sheet 30 with top and bottom folds 31 enclosing scented portions 33 and an orthogonal middle fold 32. The sheet 30 is said to produce the relatively even stack 34 shown in profile.

Claim 2 further limits the method of claim 1 by further including the steps of:

inserting the stacked sheets into an automated sheet feeding device; and

automatically feeding individual sheets onto collations of documents passing below on an inserter chassis to form mail pieces having scented advertisement inserts.

SCOPE AND CONTENT OF PRIOR ART

Claim 1 stands rejected over a patent to Olson.⁴ Claim 2 stands rejected over the combination of Olson and a patent to Viens.⁵

Pitney Bowes notes that Viens discloses a conventional inserter machine of the type that Pitney Bowes disclosed as the prior art in its specification.⁶ Pitney Bowes describes⁷ such machines and their conventional use as follows—

It is well known in automated mail production systems to include advertising inserts into individualized mail pieces. It is also known that such advertising inserts may include advertisements for perfumes or cologne, and that such advertisements may be comprised of folded sheets that release a sample of advertised scent when the folded portion opened.

Inserter systems such as those applicable for use with the present invention, may include machines such as the 8 series, 9 series, and APSTM inserter systems available from Pitney Bowes Inc. of Stamford Connecticut.

In many respects, the typical inserter system resembles a manufacturing assembly line. Sheets and other raw materials (other sheets, enclosures, and envelopes) enter the inserter

⁴ Craig W. Olson, "Publication reference-aid system [sic, and] apparatus therefor", U.S. Patent 5,911,442 (issued 15 June 1999) (Olson).

⁵ Wilfred S. Viens, "Apparatus and method for conveying a product", U.S. 6,629,690 (issued 7 October 2003) (Viens).

⁶ Br. 11. Viens itself also describes the insertion of pre-folded advertising inserts into multi-page products as part of the prior art. Viens 1:12-24.

⁷ Specification (Spec.) 1:10-3:9.

system as inputs. Then, a plurality of different modules or workstations in the inserter system work cooperatively to process the sheets until a finished mail piece is produced. The exact configuration of each inserter system depends upon the needs of each particular customer or installation.

As seen in Fig. 1, a typical inserter system prepares mail pieces by gathering collations **13** of documents on a conveyor **15**. Above the conveyor **15**, feeders **1** feed documents onto the conveyor to form the collations **13**. Feeders **1** hold a stack **10** of inserts. The stack **10** is supported by a guide **11** and a feeding mechanism **12**. Further details of an exemplary feeder **1** are provided in copending U.S. Patent Application 10/004242 filed Oct. 25, 2001, titled REMOVABLE SHEET FEEDER WITH JAM CLEARANCE FOR USE IN AN ENVELOPE INSERTING MACHINE, assigned to the assignee of the present application, which is hereby incorporated by reference in its entirety.

The collations **13** are then transported on the conveyor **15** to an insertion station **16** where they are automatically stuffed into envelopes. After being stuffed with the collations **13**, the envelopes are removed from the insertion station **16** for further processing. Such further processing may include automated closing and sealing the envelope flap, weighing the envelope, applying postage to the envelope, and finally sorting and stacking the envelopes.

A prior art method of preparing folded scented inserts is depicted in Fig. 2. Parallel folds **22**, at opposite sides of the insert **20**, are formed to enclose the scented portions **23**. The entire insert **20** is also typically folded in half along fold **21**, parallel to the folds **22** for the scented portion. After the insert **20** is folded in half, the portion near fold **21** has a thickness of two times the sheet thickness. However, at the opposite side of insert **20**, having the folded scented portions **23**, the total thickness of the insert is four times the sheet thickness.

The consequences of one side of the insert **20** being twice as thick as the other are depicted in stack **24** of Fig. 2. When inserts **20** are stacked, the stacking will be uneven, and the side of the stack having the scented portions will tend to be higher.

Thus, the stack **24** will be more likely to lean and tip over. A traditional method for solving this problem is to use small stacks **24**, or to provide additional framework on feeder **10** to hold up a lopsided stack **24**.

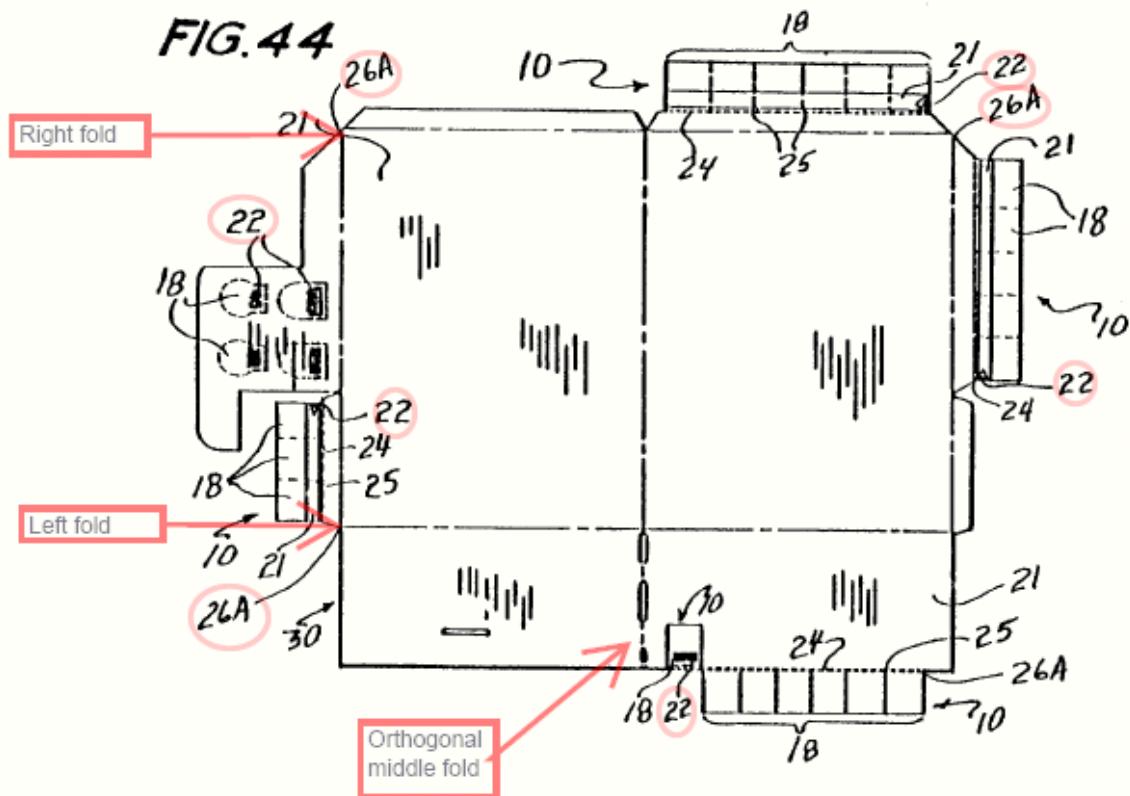
Although the specification refers to Pitney Bowes machines for examples of the prior art, the Viens technology appears to be a non-Pitney Bowes example of such conventional technology.⁸

The examiner relies on Olson to teach the folding limitations of claim 1.⁹ Olson discloses a reference marker for use with publications and similar articles.¹⁰ The examiner explains Olson's folding with reference to Olson's FIGS. **44** and **45**. These figures illustrate a portfolio embodiment of Olson's invention. Olson's FIG. **44** is shown below (indicia added):

⁸ The Viens patent is listed as assigned to Gunther International, Ltd.

⁹ Examiner's Answer (Ans.) 3-4.

¹⁰ Olson 1:21-31.

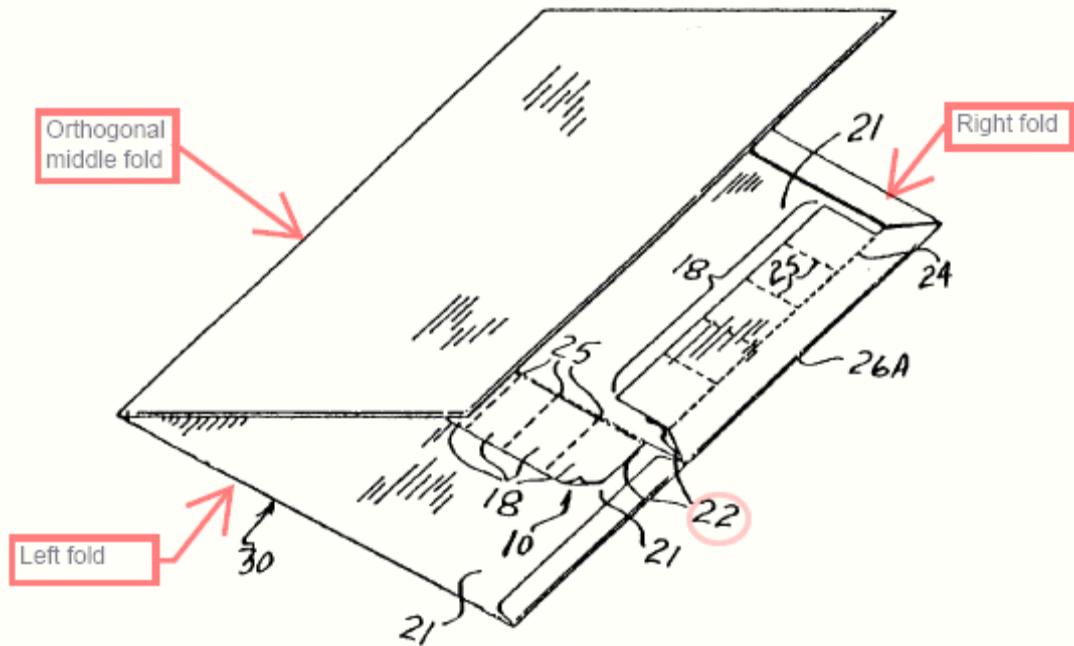


Olson's FIG. 44 shows an embodiment with top and bottom folds **26A**¹¹ and an orthogonal middle fold. Olson has adhesive layer means **22**. Olson explains that the adhesive or the substrate may be scented.¹² Olson's FIG. 45 (below, indicia added) shows the article after the folding is completed.

¹¹ The figures are a bit confusing because several fold lines are labeled "26A". For clarity, the fold lines on which the examiner relies are indicated with arrows.

¹² Olson 36:35-40.

FIG. 45



According to the examiner, if the frame of reference is rotated 90° such that Olson's top and bottom edges become left and right edges, then the requirement for left and right folds with an orthogonal middle fold is met. Pitney Bowes argues that Olson is not analogous art.¹³ The examiner insists that Olson is relevant since it can be "advertising specialty".¹⁴

Art is considered analogous if it satisfies either of two separate tests. First, is the art from the same field of endeavor, regardless of the problem addressed? Second, if not, then is the reference reasonably pertinent to the particular problem with which the inventor is involved?¹⁵ Olson could be considered to be from the same field broadly conceived (mass-production

¹³ Br. 9.

¹⁴ Olson 13:54-60.

¹⁵ *In re Bigio*, 381 F.3d 1320, 1325, 72 USPQ2d 1209, 1212 (Fed. Cir. 2004).

paper folding), but we consider it more apt to treat Olson as reasonably pertinent to the problem facing Pitney Bowes.

The problem facing Pitney Bowes (creating a stable stack of folded inserts) is not a problem that Olson addresses directly. To solve its problem, however, Pitney Bowes turned to mechanisms and techniques in the paper-folding art.¹⁶ Olson discloses a variety of folded paper items intended for mass production. Consequently, Olson is at least reasonably pertinent to one trying to determine options available for mass-production paper-folding.

Olson is mainly good for showing that the art has identified several paper folding options. Not surprisingly, two middle folds (orthogonal and parallel) dominate the art of folding (approximately) rectangular paper. Olson illustrates both.¹⁷ Indeed, the embodiment on which the examiner relies illustrates a middle fold that is both parallel and orthogonal, depending on which side folds are used for reference.

DIFFERENCES

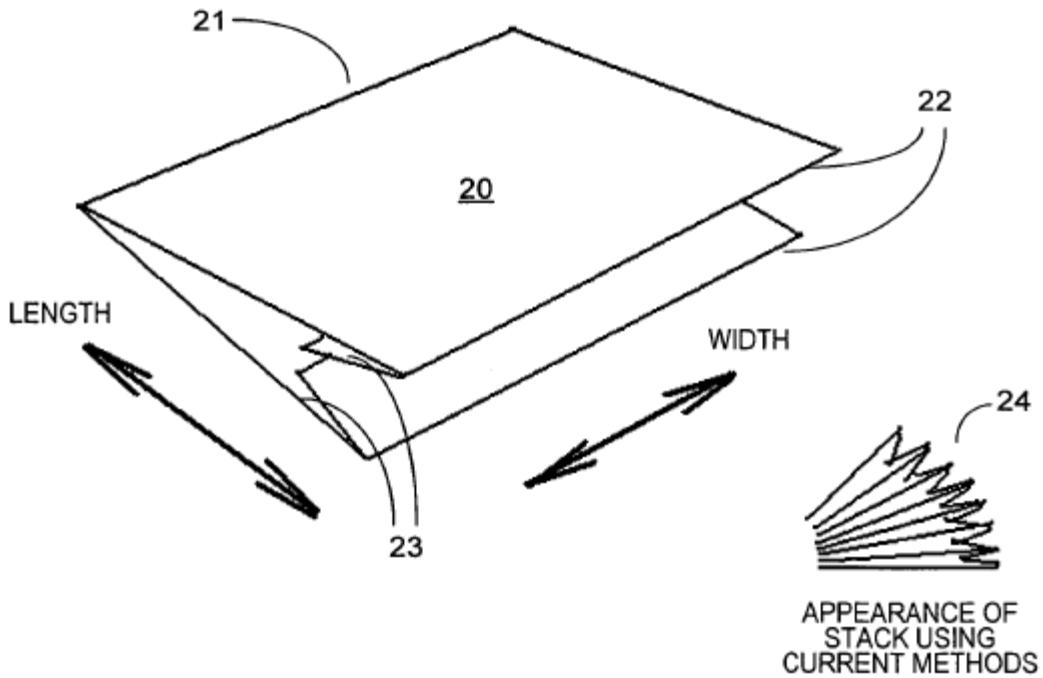
Pitney Bowes is correct that Olson is not directed to folding mailing inserts. The Olson embodiment on which the examiner relies is a pocket portfolio. Moreover, the particular embodiment on which the examiner relies does not show adhesive along the entire edge (and indeed it would be counterproductive for the pocket portion).¹⁸

¹⁶ Spec. 5:10-11.

¹⁷ Compare the book jacket folds (Olson FIGS. 30, 32, and 34) with the portfolio fold (FIG. 45). For non-orthogonal shapes, even non-orthogonal folds are illustrated (e.g., Olson FIG. 51).

¹⁸ But see, e.g., Olson FIG. 29, showing adhesive strips 22 co-extensive with the sides of the illustrated book jacket.

While Viens is said to represent the conventional prior art, the conventional prior art approach as Pitney Bowes describes it, produces a relatively uneven stack as shown in Pitney Bowes' FIG. 2:



Pitney Bowes' FIG. 2 shows a sheet 20 with end folds 22 enclosing scented portions 23 and a parallel middle fold 21. The sheet 20 is said to produce the relatively uneven stack 24 shown in profile. While Viens teaches using folded inserts,¹⁹ the examiner has not pointed us to a teaching for any orthogonal folds.

LEVEL OF SKILL

We look to the evidence of record—the applicant's disclosure, the cited references, and any declaration testimony—in resolving the ordinary

¹⁹ Viens 4:45-5:12.

level of skill in the art.²⁰ We focus on what such a person knew and could do at the time of filing.²¹

We have already discussed what the specification says those in the art knew about folding paper inserts. The specification indicates that appropriate mechanisms and techniques for making the claimed folds are "well known in the art."²² The only other direct evidence of skill in the specification is its closing assurance that those of skill would readily apprehend variations on the embodiments disclosed.²³

Olson demonstrates the wide range of creativity those skilled in the paper fabrication art bring to folding paper. Olson's folds are parallel, orthogonal, and diagonal; simple and compound; solid and perforated; and fixed with plain, scented, and flavored adhesives. Olson expects far more from practitioners in the art than the claimed invention demands.

Viens presupposes considerable electro-mechanical skill in this art. For instance, Viens expects designers to pick appropriate sensors,²⁴ and to understand the importance of maintaining stack balance and to adjust the system to maintain stack neatness.²⁵ Viens closes with the observation that

²⁰ *Ex parte Jud*, 2006 WL 4080053 at *2 (BPAI) (rehearing with expanded panel). We have not been directed to any testimony in this appeal.

²¹ *DyStar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1362-63, 80 USPQ2d 1641, 1646-47 (Fed. Cir. 2006); *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962, 1 USPQ2d 1196, 1201 (Fed. Cir. 1986).

²² Spec. 5:10-11.

²³ Spec. 6:1-5.

²⁴ Viens 6:18-23.

²⁵ Viens 10:51-60.

the high-speed, adjustable system is event-driven and relies on sensors and computer controls to ensure proper position and function during operation.²⁶

From the facts above, we infer that those skilled in the art possessed considerable mechanical sophistication, appreciated the range of mechanisms and techniques available to fold paper, and were competent to implement a wide range of folding designs within a high-speed insertion system.

ANALYSIS

Claim grouping

Although Pitney Bowes nominally argues claims 1 and 2 separately, the additional limitations in claim 2 appear to be in the admitted prior art. Moreover, the focus of the argument for claim 2 repeats putative deficiencies of Olson in meeting claim 1, deficiencies that Viens is said not to remedy.²⁷ Consequently, we treat claim 2 as standing or falling with claim 1.

Combining Olson with the mailing insertion prior art

The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.²⁸ When there is a design need to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has a good

²⁶ Viens 12:61-13:16.

²⁷ Br. 11.

²⁸ *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161, 82 USPQ2d 1687, 1690-91 (Fed. Cir. 2007), citing *KSR Int'l*, 127 S. Ct. at 1739, 82 USPQ2d at 1395.

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reason to pursue the known options within his or her technical grasp. If this leads to the expected success, it is likely the product not of innovation but of ordinary skill and common sense. The fact that a combination was obvious to try might show that it was obvious under §103.²⁹ In the mass-produced, folded, orthogonal paper art, there is a small number (2) of common mid-line folds (orthogonal and parallel). Those skilled in the art of high-speed mailing inserts would have been aware of the folding options available and the mechanisms for implementing those options. Given the small number of common, practical mid-line fold options, it does not take much reason to try one or the other. The never-ending search for aesthetic variation could be reason enough.

HOLDING

The rejection of claims 1 and 2 under § 103 is—

AFFIRMED

LP

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²⁹ *KSR Int'l*, 127 S. Ct. at 1742, 82 USPQ2d at 1397.