

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

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte DONALD SPECTOR

---

Appeal No. 2000-0580  
Application No. 09/025,347

---

ON BRIEF

---

Before STAAB, NASE and JENNIFER D. BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 and 4-7, which are all of the claims pending in this application.<sup>1</sup>

---

<sup>1</sup> Claim 3 was canceled subsequent to the final rejection (see Paper Nos. 7 and 8).

Appeal No. 2000-0580  
Application No. 09/025,347

### BACKGROUND

The appellant's invention relates to a phonics training system adapted to teach pre-school children having a limited vocabulary of words how to spell and read those words. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced in the opinion section of this decision.

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

|        |           |               |
|--------|-----------|---------------|
| Corder | 5,302,132 | Apr. 12, 1994 |
|--------|-----------|---------------|

The following rejection is before us for review.

Claims 1 and 4-7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Corder.

Reference is made to the brief and reply brief (Paper Nos. 15 and 17) and the final rejection, first and second advisory actions and answer (Paper Nos. 6, 8, 10 and 16) for the respective positions of the appellant and the examiner with regard to the merits of this rejection.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied Corder reference, and to the respective positions articulated by the appellant and the examiner. For the reasons which follow, we cannot sustain the examiner's rejection.

Claim 1, the only independent claim pending in the application, reads as follows:

1. A phonics training system adapted to teach a pre-school child having a limited vocabulary of words that identify various objects to spell these words and thereby be able to read; said system comprising:

A. a computer having an output terminal provided with a video screen;

B. an electronic dictionary associated with the computer in which is digitally stored the phonetic sounds of the words in the limited vocabulary of the pre-school child that identify objects and the letters of the alphabet that spell each word; said electronics dictionary being contained in software downloaded into the memory of the computer;

C. an image library associated with the computer in which is digitally stored images of said objects identified by the limited vocabulary; and

D. means including a voice recognition unit in the input of said computer, the unit acting to recognize the distinctive sound pattern of the child speaking into the unit and to condition the phonetic dictionary to respond to this pattern, whereby when the child speaks into the unit a specific word included in the dictionary identifying a particular object, the output of the unit is digitized and the computer then acts to scan the dictionary to find the corresponding phonetic sounds digitally stored therein, and when a match is found to present on the screen the letters which spell the specific word and the image of the object identified thereby.

The examiner's findings with regard to the Corder reference are set forth on pages 3-5 of the final rejection. On the basis of those findings, the examiner has apparently determined that there are differences between the disclosure of Corder and the claimed subject matter, in that all of the claims are rejected under 35 U.S.C. § 103 as being unpatentable over Corder. However, with particular regard to independent claim 1, as well as claims 4 and 5, the final

rejection does not provide any guidance as to what differences the examiner ascertained between Corder and the claimed subject matter.<sup>2</sup> Further, the examiner's comments in the first advisory action (Paper No. 8) to the effect that "Corder teaches all of the structural features of the present invention" and that "it would have been obvious to one skilled in the art to use these features in the order suggested by the applicant" are not particularly enlightening in this regard. We find even more perplexing the examiner's explanation in the attachment to the second advisory action (Paper No. 10) that

Corder teaches all of the independent structural features of the invention claimed but fails to specifically recite the ability of these to perform the tasks suggested in the functional language of the applicant's apparatus claims. However, the invention of Corder is capable of demonstrating all of the specific tasks of the invention claimed.

In short, the examiner's position with regard to the differences between the claimed subject matter and the disclosure of Corder is not clear from the record. Our analysis of the differences between Corder and the claimed subject matter follows.

Corder discloses a computer instructional system and method for improving communication skills comprising a library of stored letters, words and phonetic sounds that make up words, as well as their phonograms (symbols representing the sounds of the language), which are used, *inter alia*, to instruct students in the syllabication of words (see

---

<sup>2</sup> In making a determination as to obviousness, after the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. See Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Example 3, column 24, line 1, to column 26, line 60). Thus, in our opinion, Corder meets the limitations of paragraphs A and B of claim 1.

We also note that Corder (Figure 7(a)) discloses structure for displaying images, such as animals, people, musical instruments, etc., which are known to make particular sounds, on a computer screen, making a sound to be heard by the student, and prompting the student to select the image which represents the person or object which makes the sound. Further, Corder discloses structure for displaying images on a computer screen and prompting the student to select the image which meets a particular criterion (Figure 7(b); column 13, lines 1-9). However, there is no indication that these images are "images of said objects" identified by the words for which the phonetic sounds and letters are stored in the electronic dictionary, as required by claim 1.

The Corder system also comprises a microphone, voice recorder and voice analysis hardware which permits a student to enunciate a sound, syllable or word to try to imitate, as closely as possible, the standard sound, syllable or word spoken by the speech synthesizer from the stored library of the system. Unlike the voice recognition unit recited in claim 1, which acts to "recognize the distinctive sound pattern of the child speaking into the unit and to condition<sup>3</sup> the phonetic dictionary to respond to this pattern" (i.e., modify the stored phonetic dictionary to match the speech patterns of the child), the voice analysis hardware of Corder

---

<sup>3</sup> We interpret this term as "to affect, modify or influence" (Webster's New World Dictionary, Third College Edition (Simon & Schuster, Inc. 1988)).

Appeal No. 2000-0580  
Application No. 09/025,347

seeks to modify the speech pattern of the student to match that of the stored phonetic dictionary (see column 20, lines 25-55; column 26, lines 31-60). Additionally, we find in Corder no disclosure of structure which causes the sounds spoken into the microphone to be digitized and causes the computer to scan the dictionary to find the corresponding phonetic sounds digitally stored therein and, when a word match is found, to present on the screen the letters which spell the corresponding word and the image of the object identified thereby, as required in paragraph D of claim 1.

In summary, we have determined that, with respect to claim 1, Corder fails to disclose (1) an image library as recited in paragraph C, (2) a voice recognition unit which conditions the phonetic dictionary to respond to the child's distinctive sound pattern and (3) structure for performing the function set forth in the language in paragraph D following "whereby."

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The

Appeal No. 2000-0580  
Application No. 09/025,347

examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000).

We find in the teachings of Corder no suggestion to modify the system disclosed therein so as to arrive at the claimed invention and the examiner has not offered any explanation as to why it would have been obvious to one of ordinary skill in the art to do so. In fact, with particular regard to the recited voice recognition unit, it is our opinion that modification of Corder's voice input and analysis unit to cause it to condition the phonetic dictionary to respond to the child's sound pattern would render the system unsatisfactory for achieving Corder's instructional objective of teaching the student to imitate the standard phonetic sounds stored in memory and spoken by the voice synthesizer and, as such, would not have been obvious to one of ordinary skill in the art.<sup>4</sup> From our perspective, the only motivation for modifying the Corder system so as to arrive at the invention recited in claim 1 is found in the luxury of hindsight

---

<sup>4</sup> Where the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, the proposed modification would not have been obvious. See Tec Air Inc. v. Denso Mfg. Michigan Inc., 192 F.3d 1353, 1360, 52 USPQ2d 1294, 1298 (Fed. Cir. 1999); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Appeal No. 2000-0580  
Application No. 09/025,347

accorded one who first viewed the appellant's disclosure. Accordingly, we shall not sustain the examiner's rejection of independent claim 1 or claims 4-7 which depend therefrom.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 and 4-7 under 35 U.S.C. § 103 is reversed.

REVERSED

|                             |   |                 |
|-----------------------------|---|-----------------|
| LAWRENCE J. STAAB           | ) |                 |
| Administrative Patent Judge | ) |                 |
|                             | ) |                 |
|                             | ) |                 |
|                             | ) |                 |
|                             | ) | BOARD OF PATENT |
| JEFFREY V. NASE             | ) | APPEALS         |
| Administrative Patent Judge | ) | AND             |
|                             | ) | INTERFERENCES   |
|                             | ) |                 |
|                             | ) |                 |
| JENNIFER D. BAHR            | ) |                 |
| Administrative Patent Judge | ) |                 |

Appeal No. 2000-0580  
Application No. 09/025,347

Keith D. Nowak  
Lieberman & Nowak, LLP  
350 Fifth Avenue  
New York, NY 10118

# ***Jenine Gillis***

Appeal No. 2000-0580

Application No. 09/025,347

APJ BAHR

APJ NASE

APJ STAAB

DECISION: REVERSED

Panel Change: Yes No

Prepared: July 3, 2001

3 MEM. CONF. Y N

OB/HD

GAU: 2800

PALM

ACTS 2

BOOK

DISK (FOIA)