

# United States Court of Appeals for the Federal Circuit

2006-1599, -1600  
(Reexamination Nos. 90/005,841 and 90/005,842)

IN RE TRANS TEXAS HOLDINGS CORP.

David L. Parker, Fulbright & Jaworski L.L.P., of Austin, Texas, argued for appellant. With him on the brief was Marcy Hogan Greer. Of counsel was Shafeeqa Watkins Giarratani.

William LaMarca, Associate Solicitor, United States Patent and Trademark Office, of Arlington, Virginia, argued for the Director of the United States Patent and Trademark Office. With him on the brief was Thomas L. Stoll, Associate Solicitor. Of counsel was Stephen Walsh, Acting Solicitor.

Appealed from:      United States Patent and Trademark Office  
                            Board of Patent Appeals and Interferences

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DECIDED: August 22, 2007

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Before MICHEL, Chief Judge, MAYER and DYK, Circuit Judges.

DYK, Circuit Judge.

Appellant Trans Texas Holdings Corp. ("Trans Texas") appeals the decision of the Board of Patent Appeals and Interferences ("Board") in Reexamination Nos. 90/005,841 and 90/005,842. The Board affirmed the examiner's rejection of all of the claims of U.S. Patent No. 5,832,461 (filed Oct. 23, 1991) ("461 patent") and U.S. Patent No. 6,052,673 (filed Nov. 2, 1998) ("673 patent") as obvious under 35 U.S.C. § 103. We affirm.

## BACKGROUND

I

Trans Texas is the assignee of both the '461 patent and the '673 patent. The '673 patent is a continuation of the '461 patent. The patents' specifications, which are nearly identical, describe a system of inflation-adjusted deposit and loan accounts. '461 patent col.2 ll.55-59; '673 patent col.2 ll.55-59. By adjusting the interest paid on deposit accounts, or received on loan accounts, to compensate for inflation, the patented

system purports to insulate the value of assets from inflationary fluctuations. In addition, the patented system seeks to match, or "hedge," any increased interest a financial institution must pay to depositors as a result of inflation adjustments with the increased inflation-adjusted interest payments it receives from borrowers, thereby providing stability to the financial institution. '461 patent col.3 ll.27-37; '673 patent col.2 ll.27-37 ("[D]uring times of inflation . . . negative cash flows attributable to . . . deposit accounts will be compensated for by incoming payments on loan accounts.").

## A

The '461 patent has three independent claims, claims 1, 24, and 36. Independent claim 1 claims "[a]n investment system for providing an improved capital structure for an institution" composed, basically, of a deposit account and an account management data processor. '461 patent col.25 l.64-col.26 l.51. The claimed deposit account has a principal component representing the initial cash investment of the depositor and an accrual component representing interest paid that has both a fixed interest and a variable interest component. Id. col.26 ll.39-42. Claim 1 notes that the "deposit accrual component" is adjusted "in a manner responsive to the rate of inflation," id. (emphasis added), which the specification defines as "directly responsive to a market indicator of prior actual inflation and it is not meant to include the market's expectation of future inflation," id. col.3 ll.12-14 (emphasis added).<sup>1</sup> Claim 1 also specifies that the data processor includes means for "retiring the fixed interest component" and "paying

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<sup>1</sup> The specification definition states in full: "Responsive to the rate of inflation, as used herein, means directly responsive to a market indicator of prior actual inflation and it is not meant to include the market's expectation of future inflation." '461 patent col.3 ll.11-14.

the deposit principal component" according to schedules over the term of the deposit account. Id. col.26 ll.48-51.<sup>2</sup>

Independent claim 24 is generally similar to claim 1 for purposes of this appeal and includes the "responsive to the rate of inflation" limitation. Id. col.28 ll.47-59. It excludes claim 1's reference to retiring the fixed interest and paying the principal according to schedules. Id. Independent claim 36 is similar to claim 1 for purposes of this appeal but covers both deposit and loan accounts. Id. col.29 l.25-col.30 l.9. Similar to claim 1, it claims a "means for adjusting the amount in the deposit account in a manner responsive to the rate of inflation" and a "means for determining the amount in the loan accrual component in a manner responsive to the rate of inflation." Id. col.29

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<sup>2</sup> Claim 1 states in full:

An investment system for providing an improved capital structure for an institution comprising:

means for establishing data representative of at least one deposit account for a term, the deposit account having a deposit principal component and a deposit accrual component, the deposit accrual component having a fixed interest component and a variable interest component; and

an account management data processor for servicing the deposit account over the term, including:

means for determining the rate of inflation;

means for adjusting the amount in the deposit accrual component in a manner responsive to the rate of inflation;

means for retiring the fixed interest component by a first schedule over the term; and

means for paying the deposit principal component according to a second schedule over the term.

'461 patent col.25 l.64-col.26 l.51.

I.37-col.30 I.3 (emphases added). Most of the '461 patent's dependent claims were not argued separately on appeal and thus stand or fall with their corresponding independent claim. See In re Dance, 160 F.3d 1339, 1340 n.2 (Fed. Cir. 1998). Some of the dependent claims include other limitations described below.

## B

The '673 patent has four independent claims, claims 1, 9, 22, and 25. Claim 1 claims a "method of managing financial accounts" by providing deposit and loan accounts that are adjusted "as a function of a rate of inflation," "paying the deposit accounts," and "receiving repayment of the loan account." '673 patent col.25 l.60-col.26 l.42. Claim 1 also recites the use of "an account data processor." Id. col.26 l.37.<sup>3</sup> Claim 9 claims a method whereby an institution provides a deposit account to a

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<sup>3</sup> Claim 1 states in full:

A method of managing financial accounts comprising:  
providing a plurality of deposit accounts with a financial institution;  
adjusting the amount in each deposit account as a function of a rate of inflation;  
providing at least one loan account with said financial institution using funds deposited with the financial institution;  
adjusting the amount in the loan account as a [f]unction of a rate of inflation using an account data processor,  
paying the deposit accounts; and  
receiving repayment of the loan account by said financial institution in a manner where the funds in the loan account obtain a rate of return responsive to a rate of inflation.

'673 patent col.25 l.60-col.26 l.42.

depositor, uses a portion of the funds deposited to obtain a financial instrument “whose rate of return adjusts with inflation,” and pays the “depositor a rate of return on funds . . . based on a rate of inflation.” Id. col.26 l.61-col.27 l.7 (emphases added).<sup>4</sup> Claim 22 is nearly identical to claim 9, except that it calls for the institution to obtain “a mortgage secured by real estate,” rather than “a financial instrument.” Id. col.27 l.41-col.28 l.10. Claim 25 is also similar to claim 9 for purposes of this appeal, except that it specifies that the financial instrument pays “the inflation-adjusted principal component at the end of the term,” which the parties refer to as “balloon payments.” Id. col.28 l.16-35. None of the dependent claims of the '673 patent was argued separately on appeal, and they therefore stand or fall with their independent claim. See Dance, 160 F.3d at 1340 n.2.

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<sup>4</sup> Claim 9 states in full:

A method for an institution to manage at least part of a program to provide a depositor of funds a rate of return on said funds variable with a rate of inflation, comprising:

providing a deposit account by the institution for receiving said funds from said depositor;

allocating at least a portion of said funds for obtaining an asset whose rate of return adjusts with inflation;

using said allocated funds to obtain said asset whose return adjusts with inflation and is determined using a dataprocessor, said asset comprising a financial instrument having an obligated rate of return indexed to a rate of inflation; and

paying said depositor a rate of return on funds relieved based on a rate of inflation.

'673 patent col.26 l.61-col.27 l.7.

On October 6, 2000, Trans Texas requested reexamination of the '461 and '673 patents based on a substantial new question of patentability. The United States Patent and Trademark Office ("PTO") granted this request on December 6, 2000, and initiated separate reexamination proceedings for each patent.

II

A

In the course of the reexamination proceeding, Trans Texas urged that the PTO was bound by a claim construction rendered in an earlier infringement proceeding to which the PTO was not a party. On October 12, 1999, Trans Texas had filed a complaint against Pimco Advisors, L.P. in the United States District Court for the Western District of Texas, alleging infringement of the '461 and '673 patents. On August 28, 2000, the district court had issued its claim construction ruling, which adopted the definition of the term "responsive to the rate of inflation" found in the specification, that is, it held that the term should be defined as "directly responsive to a market indicator of prior actual inflation and is not meant to include the market's expectation of future inflation." Trans Texas Holdings Corp. v. Pimco Advisors, L.P., No. 99-CA-658, slip op. at 10 (W.D. Tex. Aug. 28, 2000) ("Markman Order"). Relying on language in the accompanying district court opinion, Trans Texas urges that the district court also interpreted the "responsive to the rate of inflation" language to require a continuous, one-to-one relationship between inflation and adjustments. See id. at 12 ("The '461 patent uses the phrase 'responsive to the rate of inflation' which more clearly imparts a one-to-one correlation."). For purposes of this appeal, we will assume that Trans Texas's interpretation of the district court order is correct. The district court also

held that the term “as a function of the rate of inflation” in claim 1 of the ’673 patent had the same meaning as the term “responsive to the rate of inflation.” Id. at 12. The district court construed the term “based on the rate of inflation” in claims 9 and 25 of the ’673 patent “to require the rate of return to be directly related to the rate of inflation.” Id. at 12-13.

The parties then reached a settlement before trial, and the district court issued an “Order of Dismissal with Prejudice” on January 8, 2001.

## B

On February 11, 2002, the examiner mailed final office actions in the reexamination proceedings rejecting all of the claims of the ’461 and ’673 patents as obvious under 35 U.S.C. § 103. The primary issue before the examiner was the construction of the terms “responsive to the rate of inflation” and “as a function of a rate of inflation.” In holding the claims unpatentable, the examiner principally relied on Santosh Mukherjee & Claire Orlans, Indexation in an Inflationary Economy: A Case Study in Finland, Vol. XL, Broadsheet No. 551, PEP The Social Science Institute, April 1975, at 50-73, 106-111 (“Mukherjee”). Mukherjee discusses the decision of banks in Finland in the 1950s to “adjust both their loans and deposits for inflation, on the basis of quarterly inspections of the cost-of-living index.” Id. Among other accounts, it describes “A” deposit accounts, which provided “100 per cent index compensation” for every one percent increase in the cost of living index.<sup>5</sup> That is, for every one percent increase in

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<sup>5</sup> The predecessor of “A” accounts had required an initial cost-of-living index value of 106 before compensation was paid and had only paid compensation for every two percent increase in the cost-of-living index. However, since the 106 value was reached at the beginning of 1956, this requirement no longer existed when A accounts

the cost of living index, the capital was increased by one percent. Mukherjee also discloses that banks charged an inflation-adjusted “surcharge” on their loans in order to provide the funds needed for fully inflation-adjusted deposit accounts. It notes that “[t]he amount of the surcharge was usually fixed according to the proportion of the bank’s deposits benefiting by index adjustment, so that the bank could just balance its commitments.” Id. Although Mukherjee “lacks[] an explicit recitation of the data-processor for account management,” the examiner concluded that U.S. Patent No. 4,774,663 (filed Nov. 21, 1983) (“Musamanno”) “demonstrates that it was notoriously well-known to employ data-processors to manage plural accounts” and therefore it would have been obvious to a person of ordinary skill in the art to apply Musamanno’s data processor to Mukherjee.

On March 25, 2002, Trans Texas appealed the examiner’s decisions on both the ’461 and ’673 patents to the Board. Trans Texas first argued that under our decision in In re Freeman, 30 F.3d 1459 (Fed. Cir. 1994), issue preclusion bound the Board to apply the district court’s claim construction of the terms “responsive to the rate of inflation” and “as a function of a rate of inflation.” The Board, in similar but separate opinions for each reexamination proceeding, rejected this argument. The Board held that a different claim construction standard applies in PTO proceedings, giving claims “their broadest reasonable interpretation consistent with the specification.” See Ex Parte Trans Texas Holdings Corp., No. 2005-2642, Reexamination No. 90/005,841, slip op. at 4 (B.P.A.I. May 26, 2006) (“461 Board Decision”); Ex Parte Trans Texas Holdings

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were first offered in January 1957. Similarly, the A accounts were made “more sensitive” than the predecessor accounts, paying compensation for one percent increases in the cost-of-living index.

Corp., No. 2005-2643, Reexamination No. 90/005,842, slip op. at 4 (B.P.A.I. May 26, 2006) (“673 Board Decision”). The Board also concluded that the district court’s claim construction was not “necessary to the judgment rendered in the previous action” in light of the pre-trial settlement and dismissal. ’461 Board Decision at 5-6; ’673 Board Decision at 5-6.

Alternatively, Trans Texas argued that, even apart from issue preclusion, “the claims require a continuous (i.e., nonstepped) relationship such that different amounts of prior actual inflation will result in different inflation adjustments.” ’461 Board Decision at 7; see also ’673 Board Decision at 7. The Board disagreed. It noted the specification’s definition of “responsive to the rate of inflation”—“directly responsive to a market indicator of prior actual inflation and it is not meant to include the market’s expectation of future inflation.” ’461 Board Decision at 7. The Board concluded that this “was meant to emphasize that the calculations of inflation adjustments must be based on the market indicator data which represents prior actual inflation.” Id. (emphasis in original). Relying as well on the dictionary definition of “directly,” the Board concluded that the claims were broad enough to cover non-continuous adjustments. ’461 Board Decision at 7-8; ’673 Board Decision at 9.

The Board upheld the examiner’s obviousness rejection of all of the claims of the ’461 and ’673 patents based on these constructions and its interpretation of other claim terms. It concluded that claims 24-26, 28-32, 34-37, and 38-44 of the ’461 patent and claims 1-24 of the ’673 were unpatentable over Mukherjee in view of Musmanno. The Board rejected the remaining claims of the ’461 and ’673 patents over Mukherjee in view of Musmanno and additional references.

Trans Texas timely appealed the decisions, and we consolidated the appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A) (2000). We review questions of issue preclusion and claim construction without deference. See Shell Petroleum, Inc. v. United States, 319 F.3d 1334, 1338 (Fed. Cir. 2003) (issue preclusion); Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1455 (Fed. Cir. 1998) (claim construction).

## DISCUSSION

### I

Trans Texas first argues that the Board erred in construing the term “responsive to the rate of inflation” in the ’461 patent and the related terms “as a function of a rate of inflation” and “based on a rate of inflation” in the ’673 patent. Trans Texas has treated these terms as equivalent and focused on the “responsive to the rate of inflation” limitation, and we will do likewise.

### A

Trans Texas primarily argues that the Board should have given preclusive effect to the district court’s Markman order, which construed “responsive to the rate of inflation” to mean “directly responsive to a market indicator of prior actual inflation and is not meant to include the market’s expectation of future inflation.” Markman Order at 15. As discussed above, we assume, as Trans Texas argues, that the district court construed the term to require a “continuous, one-to-one correlation with the inflation rate.” Appellant’s Br. 20; see also Markman Order at 12.

Traditionally, issue preclusion, also known as collateral estoppel, applied only where the same parties to an earlier proceeding were involved in later litigation involving

the same issue. See Restatement (Second) of Judgments § 27 (1982); Id. § 29 Reporter's Note. More modern decisions in some circumstances apply issue preclusion even where the parties to the subsequent suit are not the same. See Parklane Hosiery Co. v. Shore, 439 U.S. 322, 326-33 (1979); Restatement (Second) Judgments § 29. The latter doctrine is known as non-mutual collateral estoppel, and it is this latter doctrine that Trans Texas relies on here.

Issue preclusion is not warranted in this case because the PTO was not a party to the earlier litigation. Our case law has identified four prerequisites to the application of issue preclusion: "(1) identity of the issues in a prior proceeding; (2) the issues were actually litigated; (3) the determination of the issues was necessary to the resulting judgment; and, (4) the party defending against preclusion had a full and fair opportunity to litigate the issues." Jet, Inc. v. Sewage Aeration Sys., 223 F.3d 1360, 1365-66 (Fed. Cir. 2000) (emphasis added).

The PTO as "the party against whom the earlier decision is asserted" thus must have been accorded "a 'full and fair opportunity' to litigate that issue in the earlier case." Allen v. McCurry, 449 U.S. 90, 95 (1980); Freeman, 30 F.3d at 1467 (Fed. Cir. 1994). However, the PTO was not even a party to the earlier district court litigation and cannot be bound by its outcome. Trans Texas nevertheless argues that this requirement should somehow be excused because the PTO proceedings were ex parte. This argument simply makes no sense. The PTO is plainly a party to these appeal proceedings, and if it were not treated as a party, there would be no basis for even considering the application of issue preclusion in the first place.

We have never applied issue preclusion against a non-party to the first action. In fact, the Supreme Court has specifically held that “litigants . . . who never appeared in a prior action[] may not be collaterally estopped without litigating the issue. . . . Due process prohibits estopping them despite one or more existing adjudications of the identical issue which stand squarely against their position.” Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found., 402 U.S. 313, 329 (1971); see also Parklane Hosiery, 439 U.S. at 327 n.7 (“It is a violation of due process for a judgment to be binding on a litigant who was not a party or a privy and therefore has never had an opportunity to be heard.”); Restatement (Second) of Judgments § 29 Reporter’s Note (“The proposition that a non-party cannot be bound by a judgment, unless he is represented by a party or has interests that are derivative from a party, is a rule of Constitutional law.”).<sup>6</sup>

Recognizing the general rule against collaterally estopping a non-party, Trans Texas asserts that it somehow represented the PTO’s interests in the district court action. However, the “presumption that nonparties are not bound by a judgment” can only be rebutted in limited circumstances, such as when the non-party was in privity with a party, has interests that are derivative from a party, or “participate[d] in an active and controlling way” in the litigation. See 18A Charles Alan Wright, et al., Federal Practice & Procedure § 4449 (2d ed. 2002); Restatement (Second) of Judgments § 29 Reporter’s Note. The PTO’s interests were not represented in the earlier litigation even though Trans Texas there urged that the district court reject the construction that the district

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<sup>6</sup> While the Due Process Clause of the Fifth Amendment does not apply to the government, see South Carolina v. Katzenbach, 383 U.S. 301, 323-24 (1966), the procedural protections afforded to private parties in the res judicata and collateral estoppel context also apply to the government, see United States v. Stauffer Chem. Co., 464 U.S. 165, 170 (1984).

court adopted. Since the PTO was not a party to the district court litigation, issue preclusion does not apply.

Contrary to Trans Texas's argument, our decision in Freeman does not require the application of issue preclusion. In Freeman, we held that a patentee in a PTO proceeding was barred by issue preclusion from asserting a claim construction already rejected in a district court infringement action brought by the patentee against a third party. 30 F.3d at 1469. Nothing in Freeman suggests that issue preclusion could be applied against the PTO or another non-party to the infringement proceeding.<sup>7</sup>

## B

Alternatively, Trans Texas urges that the Board erroneously rejected its proposed claim construction and that the claims require continuous, one-to-one adjustments. It is not entirely clear what Trans Texas means by "continuous" or "one-to-one." Any inflation-adjustment is subject to the available inflation data. That is, it is limited by the way in which inflation data are reported, both in terms of the frequency of reporting (e.g., monthly, quarterly, yearly, etc.) and the specificity of reporting (i.e., how many decimal places the rate of inflation is carried out). Thus, no inflation-adjustment system can truly be "continuous" and "one-to-one" with the true rate of inflation. Instead, as best we can understand it, Trans Texas's argument is that for every increase in the reported rate of inflation, there must be an immediate and equal inflation adjustment. We understand this argument to be an attempt to distinguish the Mukherjee prior art

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<sup>7</sup> In light of our resolution of Trans Texas's issue preclusion argument, we have no need to decide whether non-mutual collateral estoppel against the government would be permissible at all in the circumstances of this case. See United States v. Mendoza, 464 U.S. 154 (1984).

reference, which did not disclose an immediate inflation adjustment to deposit accounts for every increase in the rate of inflation. Instead, increases were only made when the increase in the rate of inflation reached one percent.<sup>8</sup>

Trans Texas's argument is not persuasive. Claims are given "their broadest reasonable interpretation, consistent with the specification, in reexamination proceedings." In re Yamamoto, 740 F.2d 1569, 1571 (Fed. Cir. 1984). The term "responsive to the rate of inflation" is defined in the specification as "mean[ing] directly responsive to a market indicator of prior actual inflation and it is not meant to include the market's expectation of future inflation." '461 patent col.3 ll.11-14. As the Board noted, the specification's definition only requires that the inflation adjustment be "directly responsive" to a market indicator of inflation. There is nothing in the specification or the prosecution history that requires an immediate inflation-adjustment every time the rate of inflation increases. Trans Texas argues that immediate responsiveness is the only construction consistent with the specification because "each of the examples in the '461 specification . . . [is] adjusted on a one-for-one basis." Appellant's Br. 19. Even if the examples are so limited (which the PTO disputes), Trans Texas's argument conflicts with our decision in Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In Phillips, we held that while "the specification [should be used] to interpret the meaning of a claim," courts must not "import[] limitations from the specification into the claim." Id.

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<sup>8</sup> Trans Texas also points out that some of the deposit accounts in Mukherjee had features requiring: (1) that a threshold value be exceeded before any inflation-adjustment was made; (2) a proportional adjustment (i.e., every one point inflation increase leads to a one-half percent inflation-adjustment). Trans Texas argues that these accounts were not "directly responsive" to the rate of inflation. This is beside the point given the disclosures described in the text above with respect to other accounts that did not include such limiting features.

at 1323. We specifically noted that it is improper to “confin[e] the claims to th[e] embodiments” found in the specification, as Trans Texas asks us to do. Id.

Under Phillips, dictionary definitions are also pertinent. See id. at 1318 (“[T]he court has observed that dictionaries . . . can be useful in claim construction.”). The dictionary definition of “directly” confirms that the specification’s requirement that the adjustment be “directly responsive” to a market indicator does not require that an inflation-adjustment occur immediately after any increase in the reported rate of inflation. While some definitions define “directly” as “simultaneously and exactly or equally” or “immediately,” other definitions define it as “after a little: in a little while: shortly, presently.” Webster’s Third New International Dictionary Unabridged 641 (2002). In view of the latter definitions, we conclude that the broadest reasonable interpretation of “directly responsive” is not limited to situations in which the inflation-adjustment occurs immediately after any increase in the reported rate of inflation, but also includes situations in which the inflation-adjustment occurs “a little while” after an increase in the reported rate, such as when the increase reaches one percent. The Board did not err in concluding that the broadest reasonable interpretation of the term “responsive to the rate of inflation” (and related terms) is not limited to a continuous, one-to-one relationship but also includes a delayed relationship, in which adjustments are made in one percent increments.

## II

Turning to the Board’s obviousness determination, Trans Texas has relied only on its erroneous claim construction in arguing that claims 24-30, 32, and 34-35 of the

'461 patent, relating to deposit accounts, are non-obvious.<sup>9</sup> We therefore affirm the Board's determination that these claims would have been obvious. See SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1319 (Fed. Cir. 2006) ("[A]rguments not raised in the opening brief are waived.").

Trans Texas also argues that additional limitations appearing in other claims render those claims non-obvious. We cannot agree.

First, Trans Texas argues that claims 36-44 of the '461 patent and claims 1-8 of the '673 patent are non-obvious because, even if Mukherjee discloses deposit accounts responsive to the rate of inflation, Mukherjee does not disclose loan accounts that were fully adjusted with the market indicator of inflation (i.e., the inflation adjustment was equal to the increase in the market indicator of inflation), but instead only discloses loan accounts that were adjusted on a proportional basis with inflation (for example, a one percent increase in the market indicator would only result in a one-half or one-fourth percent inflation adjustment). Trans Texas is correct that the loan accounts Mukherjee describes as having actually been implemented in Finland at most imposed an inflation adjustment of one-half the increase in the rate of inflation. However, Mukherjee also discloses that banks would find the money needed to provide inflation-adjusted deposit accounts by "imposing an 'index surcharge' on all loans. . . . fixed according to the proportion of the bank's deposits benefiting by index adjustment, so that the bank could

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<sup>9</sup> Trans Texas does argue that Mukherjee "teaches away" from inflation-adjusted accounts because it describes how these accounts were abolished in Finland following a "stabilization agreement" between trade unions and employers meant to quell a price surge. It is unclear if this argument was raised before the Board. In any event, the political decision to abolish these accounts as part of a trade agreement is not in any way related to any deficiency in the utility of the invention itself.

just balance its commitments.” Mukherjee at 50-51. Further, Mukherjee discloses “A” deposit accounts with “100 per cent index compensation” for every one percent increase in inflation. Id. at 52. Thus, when a bank’s deposits were all in inflation-adjusted accounts, the surcharge on loans would equal the full amount of the rate of inflation. Compare id. at 68 (“[I]n a year when the index rose by 10 per cent, a bank with one fifth of its deposits in fully index-linked accounts would place an index surcharge of 2 per cent on all its outstanding loans.”). Substantial evidence supports the Board’s conclusion that Mukherjee discloses fully adjusting loan accounts based on increases in the rate of inflation.

Second, Trans Texas argues that claims 1-23, 31, 33, and 44<sup>10</sup> of the ’461 patent are non-obvious because these claims include a requirement for annuities. The Board relied on the prior art Zvi Bodie reference, An innovation for stable real retirement income, Portfolio Management, Fall 1980, 5 (“Bodie”). Bodie describes a “purchasing power annuity” linked to consumer price levels. Id. Trans Texas argues that Bodie in fact taught away from indexed annuities because it stated that inflation-adjusted annuities “were not commercially available” and noted a “reluctance, if not outright opposition” within certain segments of the market to price-indexed bonds. But, as the Board found, Bodie never indicated that such proposals would not work and in fact

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<sup>10</sup> Claim 31, dependent on claim 24, requires that the principal component be retired by making payments to the depositor over a series of “iteration periods.” ’461 patent col.29 ll.11-14. Claim 33, also dependent on claim 24, specifies that the “index correspond[s] generally to the consumer price index.” Id. col.29 ll.19-20. Claim 44, dependent on claim 36, requires that “the means for paying out the deposit account includes means for paying out the deposit principal component by a schedule over the term and means for paying out the deposit accrual component by a schedule over the term.” Id. col.30 ll.33-38.

noted that proposals for price-indexed bonds “have abounded.” Id. The Board’s decision as to what the prior art discloses is reviewed for substantial evidence. See In re Gartside, 203 F.3d 1305, 1308 (Fed. Cir. 2000) (noting that Board factual findings are reviewed for substantial evidence); Para-Ordnance Mfg., Inc. v. SGS Importers Int’l, Inc., 73 F.3d 1085, 1088 (Fed. Cir. 1995) (“What the prior art teaches and whether it teaches toward or away from the claimed invention . . . is a determination of fact.”). Substantial evidence supports the Board’s conclusion as to what Bodie discloses.

Third, Trans Texas argues that independent claim 9 of the ’673 patent and its dependent claims 10-14 and 16-21 are non-obvious because Mukherjee does not teach the limitation “obtaining an asset whose rate of return adjusts with inflation.” Appellant’s Br. 47. Trans Texas argues that, even if deposit accounts responsive to the rate of inflation were disclosed in the prior art, securities with rates responsive to the rate of inflation were not. We conclude that the Board’s finding that the prior art disclosed such securities was supported by substantial evidence. For example, Mukherjee describes the desire of institutional buyers to purchase “[inflation] index-linked securities” and specifically notes that “[b]anks and cooperative credit societies” sought to buy inflation-adjusted bonds “to help pay compensation on indexed deposit accounts.” Mukherjee at 59.

Fourth, Trans Texas asserts that Mukherjee does not teach the limitation “obtaining . . . a mortgage secured by real estate” (responsive to the rate of inflation) of independent claim 22 of the ’673 patent and its dependent claims (23 and 24). The Board did not err in concluding that it would have been obvious to combine the indexed loan accounts disclosed in Mukherjee with the well-known practice of offering loans

secured by mortgaged real estate. See KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1739 (2007) (“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”).

Finally, Trans Texas argues that claims 15 and 25-28 of the '673 patent were non-obvious because the prior art does not teach obtaining an inflation-adjusted financial instrument that makes “balloon” payments (i.e., paying the inflation-adjusted principal component at the end of the term). Trans Texas admits that G. Weiner, Choosing a Home Equity Plan, Restaurant Business, (Feb. 10, 1985), “does appear to describe loans where the interest is repaid monthly and the principal in a lump sum.” Appellant’s Br. 50. The Board did not err in concluding that it would have been obvious to combine the known inflation-adjusted loan accounts of Mukherjee with the known balloon payments of Weiner.

#### CONCLUSION

We conclude that the Board was not bound by the district court’s claim construction and properly construed the term “responsive to the rate of inflation” and related terms. The Board did not err in holding that claims 1-44 of the '461 patent and claims 1-28 of the '673 patent would have been obvious over the prior art.

AFFIRMED