

## Design and Operation of the Electronic Record Systems of the US Courts are Linked to Failing Banking Regulation

Joseph Zernik  
Human Rights Alert (NGO)  
Jerusalem  
e-mail: [123456xyz@gmail.com](mailto:123456xyz@gmail.com)

**Abstract—** The current report is based on data mining of the information systems of the US courts – PACER (Public Access to Court Electronic Records) and CM/ECF (Case Management/Electronic Court Filing) in general, and review of the electronic records in a landmark litigation under the current financial crisis: *Securities and Exchange Commission v Bank of America Corporation* (2009-10). The case originated in the unlawful taking of \$5.8 billion by banking executives, and concluded with the executives never returning the funds to the stockholders and with no individual being held accountable. The case was covered numerous times by major US and world media. Data mining of records of the US courts from coast to coast reveals built-in deficiencies in validity and integrity of the PACER and CM/ECF. The case study documents missing and invalid litigation records, leading to the conclusion that the case as a whole amounts to simulated litigation. A number of corrective measures are outlined, including publicly and legally accountable functional logic verification of PACER and CM/ECF, and correction of the defective signature and authentication procedures now implemented in the systems. This study highlights the significance of application of data mining to the target area of court records in particular, and records of the justice system in general. It is also a call for action by computing experts and data mining experts in for the safeguard of Human Rights and integrity of governments in the Digital Era.

Keywords- e-Courts; e-Government; United States; Banking Regulation; PACER; CM/ECF.

### I. INTRODUCTION

The US government has completed a decade-long project of transition to electronic administration of the US courts at a cost that is estimated at several billion US dollars. Courts of nations around the world are going through similar processes, and United Nations reports on judicial integrity promote such transition. Obviously, valid electronic record systems could have enhanced the integrity and transparency of the courts.

Record keeping under paper administration of the courts has evolved over centuries and formed the core of due process and fair hearing. The transition to electronic administration of the courts affected a sea change in such court procedures.

Two systems were implemented in the US district courts and US courts of appeals:

- PACER – for Public Access to Court Electronic Records, and
- CM/ECF – for Case Management and Electronic Court Filing.

Previous reports inspected the validity and integrity of the systems, and identified core defects inherent in their design and operation. [1,2]

Fraud in the state and US courts has been increasingly recognized as a key part of the current financial crisis. [3-6] A legal expert opined, "... it's difficult to find a fraud of this size on the U.S. court system in U.S. history... I can't think of one where you have literally tens of thousands of fraudulent documents filed in tens of thousands of cases." [7] Concern has also been repeatedly voiced with the ineffectiveness of US banking regulation. [7]

Other papers have documented fraud in the litigation of cases in the US district courts, in the US court of appeals, and the US Supreme Court. [8-10]

Under such circumstances, this study inspects the information systems, implemented by the US courts, and their implications in the litigation of a landmark case under the current financial crisis: *Securities and Exchange Commission v Bank of America Corporation* (1:09-cv-06829). In this case, the US Securities and Exchange Commission (SEC) purportedly prosecuted Bank of America Corporation (BAC) in the US District Court, Southern District of New York, for violations of securities laws, related to the unlawful taking by executives of \$5.8 billion. Financial analysts described the underlying matter as a 'criminal conspiracy' and 'bigger than Watergate?'

Based on data mining in this unique target area, this study claims that instead of enhancing integrity and transparency of the courts, the electronic record systems have enabled unprecedented, widespread corruption in the US courts.

This study highlights the significance of application of data mining techniques to the target area of court records. It is also a call for action by computing experts in general and data mining experts in particular for the safeguard of Human Rights and integrity of governments in the Digital Era.

A. *Authorities of Judges and Clerks*

Generally, the courts are described as consisting of two arms: the judicial arm and the ministerial (clerical) arm. Both the judges and the clerks must be duly appointed and hold their positions under Oath of Office. A judge is authorized to decide on a matter, duly presented to him by parties in a given matter. The clerk is the legal custodian of the data base of court records.

Therefore, a judge may decide and issue a signed decision in a given matter. However, such record is not a valid court record, until it is duly inspected for validity (case number, case caption, signatures, assignment of the judge to the specific case, etc) and formally entered into the data base under the signature of a named, authorized clerk. The entry of a judicial record into the data base is inseparable from authentication of the record through its service on all parties in the case. Accordingly, for example, the authentication record, accompanying each and every judicial record and signed by the Clerk in the Superior Court of California, is titled “Certificate of Mailing and Notice of Entry by the Clerk.”

B. *PACER and CM/ECF*

Critical deficiencies were previously identified in design and operation of PACER and CM/ECF: [10]

- Both the courts and the US Congress failed to establish by law the new electronic court procedures, inherent in the systems. Particularly, no law today defines the form of valid and publicly recognizable digital signatures of judges and clerks. (Figures 1,2, and 3; see Online Appendix 1)
- Public access to the electronic authentication records, which are maintained in CM/ECF, but not in PACER, is routinely denied. The corresponding records were essential part of the public records under paper administration of the courts.
- The systems enable attorneys to appear, file, and purportedly enter records with no prior review by the clerks of the courts, and with no power of attorney by their purported clients. [11,12] The systems also enable unauthorized court personnel to issue and publish online court records – dockets, minutes, orders, and judgments, which were never authenticated by the duly authorized clerks. [10]
- There is no evidence that the systems were subjected to functional logic verification in a publicly and legally accountable manner.

The outcome of such conditions, as demonstrated in this study is that the public is unable to distinguish between valid and void court records. With it, the systems enable the courts to conduct of simulated litigation, otherwise known as “Fraud on the Court”. [13]

II. METHODS

A. *General Approach to data mining of the records of the US courts*

The research presented in this paper was narrowly focused on analysis of integrity of the electronic record systems in the national courts (US district courts). The study was not based on legal analysis of the records, or challenges to the rationale of the adjudication in specific decisions, except for the laws pertaining to the maintenance of court records.

Rules, pertaining to the operation of the systems were investigated through review of the Users’ Manuals of the various courts, where available. Such manual provided limited rules at best.

Therefore, rules of the systems had to be inferred through data mining.

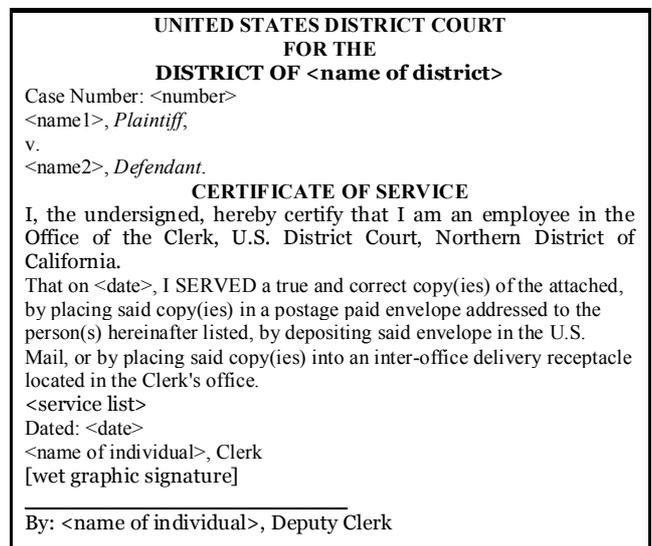


Figure 1. Paper-based Certificate of Service, as Used by the Clerks of the US District Courts Prior to Implementation of PACER and CM/ECF, the Electronic Record Systems of the US Courts.

The Certificate of Service was titled “Certificate”, it included a certification statement, “I certify...”, the name and authority of the individual executing the certification, on behalf of the clerk of the court, and his/her hand signature. The certification records were essential part of the public records in the paper court files. None of these elements were preserved in PACER and CM/ECF (Figure 2; see Online Appendix 1).

Subsequently, irregularities, or contradictory data in date, signature, certification, and registration procedures were examined through data mining methods, executed on the online public records of the courts, through various search options, provided in the systems themselves.

Initially, integrity of the basic components of the systems were examined: indices of all cases, calendars, dockets (lists of records in a given file), indices of decisions, and compliance of these components with the *Federal Rules of*

*Civil Procedure*, pertaining to the maintenance of court records and the duties of the clerks in this regard.

The analysis was also based on consultations with Israeli law computing/cryptography experts. No US law or computing expert, who was approached, agreed to discuss the matter.

*B. Information regarding PACER and CM/ECF in the US District Court, Southern District of New York*

The platforms of PACER and CM/ECF in the US District Court, Southern District of New York, are the same as previously described in other US district courts. [2, 10] The electronic authentication records (NEFs – Notices of Electronic Filings) are excluded from public access in PACER. The NEFs are today accessible only through CM/ECF, only by court personnel and by attorneys, who are authorized by the courts in particular cases.

The *Local Rules* of the US District Court, Southern District of New York, as downloaded from the Court's website, were reviewed, particularly relative to the following matters: [14]

- Operations of PACER and CM/ECF and court procedures inherent in them;
- Certification of court records under electronic filing;
- Issuance, docketing, and execution of the service of summons and complaint;
- Certification of attorneys as Attorneys of Record upon appearance, and
- Definition of valid digital signatures under electronic filing.

As was the case in other US courts, which were examined, the *Local Rules* of the US District Court, Southern District of New York, failed to provide clear and unambiguous details of electronic filing and electronic court records procedures in general, and in particular relative to the matters listed above.

Further information regarding the design and operations of PACER and CM/ECF was found in the *Electronic Case Filing Rules & Instructions* and the *CM / ECF Attorney Civil Dictionary* of the US District Court, Southern District of New York. [14] However, such sources are not valid legal sources for establishing the validity of court records.

Users' manuals, albeit not valid court records, provided additional information regarding the design and operation of PACER and CM/ECF in the various US district courts, which were inspected. [15] No public access was found online to the Users' Manual of the US District Court, Southern District of New York.

*C. Court Records in Litigation of SEC v BAC*

The primary source of records was through online public access to PACER records.

Additionally, efforts were made to obtain missing records, where access in PACER was not available, through requests, which were forwarded to the office of the Clerk of the Court, to attorneys for SEC and BAC, to the office of the Chair of SEC, and to the office of BAC President.

*Freedom of Information Act* (FOIA) requests were filed on the office of SEC and the office of Fair Fund Administrator (detailed below).

*D. Media Reports*

Major media outlets: New York Times, Washington Post, Wall Street Journal, and Times of London were searched online for media coverage of the litigation.

### III. RESULTS

*A. Public Access to Court Records through PACER*

Public access to US court records is effectively permitted only through PACER. However, the identity of the server, from which the records are displayed and downloaded is unverified. A typical browser "page info" statement for PACER is:

Website Identity

Website: <http://www.pacer.gov/>

Ownership: **This website does not supply ownership information.**

Verified by: **Not specified**

Technical Details

**Connection Not Encrypted.**

*B. Public Access to the litigation records in SEC v BAC*

*1) NEFs*

As is the case in all other US district courts, which were inspected, public access to the authentication records (NEFs) of the US District Court, Southern District of New York in PACER is denied.

Although never stated in the *Rules of Court* of the US District Court, Southern District of New York, the evidence shows that, as is the case in other US courts, the NEFs are in fact deemed the authentication records of the Court. No other form of authentication record, pertaining to judicial records (minutes, orders, judgments) was found in the PACER docket.

The form of the NEFs of the US District Court, Southern District of New York, is identical to the NEFs, as discovered in other US courts. The NEF, in and of itself, should be considered invalid Certificate of Service. It includes no mention of certification in its title, it includes no certification statement - "I certify...", it never invokes the authority of the Clerk of the Court, it never names the person, who issued the NEF, and it includes neither a graphic hand-signature, nor a valid digital signature of an authorized individual, affixed as a symbol of intent to take responsibility. Instead, it only includes a machine generated, encrypted checksum string. (Figures 1, 2; see Online Appendix 1)

*2) Calendar and Docket Activity Report*

Furthermore, the US District Court, Southern District of New York, unreasonably limits public access to the Calendars of the Courts, in contrast with other US district courts. Access is permitted only to the current seven days window. Therefore, conduct of the "off the record"

proceedings and other proceedings with no valid minutes cannot be confirmed. Likewise, the US District Court, Southern District of New York, denies access to the Docket Activity Report – critical data for confirmation of docket notations.

### 3) *Summons, Minutes*

Although the *Federal Rules of Civil Procedure* prescribe the docketing of the summons as issued by the Clerk of the Court and the minutes of the proceedings, these records were missing from PACER docket of the case at hand.

### C. *Access to Litigation Records from Other Sources*

Requests for copies of the missing litigation records, which were forwarded to the office of the Clerk of the Court, to attorneys for parties in the case, to the office of SEC Chair, and to the office of President of BAC, were all refused.

Eventually, only one NEF was obtained from the office of the Fair Fund Administrator (2; see Online Appendix 1). Access to the other NEFs was denied by the same office with no explanation at all.

The summons, as issued by the Clerk of the Court, was eventually obtained in response to a *Freedom of Information Act* (FOIA) request on SEC (Figure 4; see Online Appendix 1). [16] However, the same office failed to produce the other missing records of the NEFs in this case under the claim that “these documents are not agency records under the FOIA.” Such claim contradicted the response of the same office on the summons in this case. Conduct of SEC in this matter amounts to selective compliance with the *Freedom of Information Act*.

The September 9, 2010 FOIA response letter from SEC states:

This letter is a final response to your request, dated January 26, 2010, and received in this office on February 2, 2010, for certain information concerning SEC v. Bank of America Corporation (BAC)(1:09-cv-06829), United States District Court for the Southern District of New York. Specifically, you request copies of the following:

- a) Summons, as issued by clerk under such caption; NEF (Notice of Electronic Filing) pertaining to the Summons, as issued by clerk under such caption;
- b) Summons, as executed under such caption.
- c) NEF (Notice of Electronic Filing) pertaining to the Summons, as executed under such caption.
- d) NEF (Notice of Electronic Filing) pertaining to the complaint under such caption.
- e) NEF (Notice of Electronic Filings) for each and every court order under such caption.

In response to a) and c) above please find attached a copy of the summons issued in SEC v. Bank of America Corporation (BAC)(1:09-cv-06829).

With respect to the remainder of your request related to Notices of Electronic Filing generated by the

United States District Court for the Southern District of New York, please be advised that these documents are not agency records under the FOIA. Consequently, we are considering your request closed.

### D. *PACER Chronology of SEC v BAC (1:09-cv-06829)*

#### 1) *The PACER Docket as a Whole*

A total of 19 purported proceedings are listed in the PACER docket (see the full PACER docket and linked records under the Online Appendix). For two of the proceedings, no docket entries are found at all. These two proceedings should be deemed ‘off the record’ proceedings. For the remaining 17 proceedings, invalid docket entries are found - no minutes records at all are linked to the docket listings, no docket numbers are designated, and no information regarding content of the proceedings is provided in the docketing text.

Moreover, based on the design of the NEFs (see below), it is impossible that such docket entries were authenticated. Therefore, these are invalid docket entries, with no corresponding valid court records. (Figure 3; see Online Appendix 1) These remaining 17 proceedings should be deemed simulated court proceedings.

Of such 17 minutes with no records, 16 are listed as ‘entered’ by an individual only identified as ‘mro’. The full name and authority of the person remain unknown. In contrast, out of a total of 24 docket listings of orders and the judgment, where docket number is designated, where a record is linked, and where informative docketing text is provided, not a single item is entered by ‘mro’. The Docketing Department of the Court confirmed that docketing in the case was not performed by authorized Deputy Clerks, but refused to disclose the names of the individuals involved.

Entry of transactions in the PACER dockets by unauthorized court personnel, unbound by Oath of Office, was documented in other US district courts as well. Beyond undermining the integrity of the dockets, such practices demonstrate the lack of security and validity of PACER and CM/ECF as a whole.

Overall, nowhere in the PACER docket is the authority of the office of the Clerk of the US Court invoked, neither is the name, nor the authority of any individual as Deputy Clerk to be found.

#### 2) *Individual PACER Docket Records*

A detailed review of the entries in the PACER docket, and their validity, or lack thereof, is provided in the Online Appendix. Here, only highlights are provided.

##### a. *August 3, 2009 – Summons issued*

The PACER docket in this case states that on August 3, 2009, summons was issued as to BAC. However, absent a Docket Number, the text cannot possibly be deemed a valid docket entry. Additionally, no link is provided in the PACER docket to the summons record itself. Therefore, no

electronic authentication could have been issued through an NEF under such circumstances on the summons.

Access to the summons as issued and as served was repeatedly requested from the office of the Clerk of the Court. Access was denied.

Eventually, a copy of the summons, as issued by the Clerk of the Court, was obtained through a *Freedom of Information Act* (FOIA) response from SEC. (Figure 4; see Online Appendix 1) The summons as issued by the Clerk of the Court in this case is unsigned, and bears no seal of the Court. Therefore, the summons is in fact a simulated summons record. [13] The failure to issue and docket valid summons is consistent with the intent to conduct simulated litigation from the start.

*b. Service of Process*

Nowhere in the docket is there any indication that service of the summons was in fact executed, alternatively, that service of the summons was waived.

In the FOIA response, the unsigned summons record was provided as both the record of the summons as issued and the summons as executed. (Figure 4; see Online Appendix 1) Needless to say, execution of service of an unsigned, fraudulent summons is invalid execution.

Therefore, the service of process in this case was simulated, service of process.

*c. August 3, 2009 - Motion for entry of Settlement Agreement*

Media reported from the onset of the litigation that a proposed Settlement Agreement for \$33 million, to be paid by BAC to the US government, was filed on August 3, 2009. Later, several docket notations refer to the pending initial Settlement Agreement.

On September 24, 2009, Order was entered in the docket, purportedly rejecting the then pending proposed Settlement Agreement. However, no Motion for entry of the proposed Settlement Agreement and no proposed Settlement Agreement records are found in the docket.

The failure to file a Motion for Entry of the Settlement Agreement, and consequent issuance of an order, purported to deny the motion with no motion record are consistent with the conduct of simulated litigation.

*d. August 10, 2009 – ‘off the record’ proceeding*

There is no docket listing at all for the August 10, 2009 proceeding. However, evidence of its conduct is provided in the PACER docket entries #15,16, and 17.

The conduct of ‘off the record’ court proceeding is also consistent with the conduct of simulated litigation in this case.

*e. August 25, 2009 - Order denying the initial proposed Settlement Agreement*

The August 25, 2009 Order (Dkt #13) states:

This Court has the obligation, within carefully prescribed limits, to determine whether the proposed Consent Judgment settling this case is fair, reasonable, adequate, and in the public interest.

The ruling on a matter that was never pending before the Court is also consistent with the conduct of simulated litigation in this case.

*f. February 22, 2010, Final Consent Judgment*

On February 22, 2010, the Final Consent Judgment (Dkt #97) was filed by Judge Jed Rakoff.

The docketing text of the Final Consent Judgment states:

FINAL CONSENT JUDGMENT AS TO DEFENDANT BANK OF AMERICA CORPORATION # 10,0297 in favor of Securities and Exchange Commission against Bank of America Corporation in the amount of \$ 150,000,001.00. (Signed by Judge Jed S. Rakoff on 2/24/2010) (Attachments: # 1 Notice of Right to Appeal) (dt) (Entered: 02/24/2010)

Access was repeatedly requested to the NEF of the Final Consent Judgment, absent which, the record cannot be deemed a valid court record. Access was denied in violation of the law (First Amendment).

*3) Other PACER Records*

Detailed review of the other PACER records is provided in the Online Appendix. Here only highlights are provided:

*a. August 3, 2009 - Civil Cover Sheet*

Records of the US District Court, Southern District of New York, prescribe that a Civil Cover Sheet be filed with the complaint. Likewise, the Civil Litigation Management Manual of the Judicial Council of the United States, [18] prescribes the filing of a Civil Cover Sheet as prerequisite for opening a new docket by the Clerk of the Court, no Civil Cover Sheet is found in the docket of the case at hand. In contrast, Civil Cover Sheets are routinely found in the PACER dockets with the complaints in other cases. As further noted in the *Rules of Court*, the Civil Cover Sheet must be part of Service of Process, together with the summons and complaint.

The failure to file and docket a Civil Cover Sheet is of particular significance, since it is one of the only records, where a publicly visible, hand signature of the Clerk of the Court, identified by name and authority, is still required.

The failure to file and serve a Civil Cover is consistent with the intent to conduct simulated litigation from the start.

*4) Freedom of Information Act (FOIA) and Fair Fund Administrator Responses*

While the Clerk of the Court refused to provide access to the missing court records in this case, which were and are public records by law, access was gained to certain missing records from other sources.

The FOIA response by SEC yielded a copy of a record that was described as “summons, as issued by clerk” and “summons, as executed”. (Figure 4; see Online Appendix 1) However, the record produced in the FOIA response is an unsigned summons with no seal of the Court. Therefore, the record is a simulated summons.

The Fair Fund Administrator provided a copy of one NEF only (Figure 2; see Online Appendix 1). The same office refused to provide the NEFs of other records, most

notably the NEF of the Final Consent Judgment (Dkt #97). No explanation at all was provided by the Fair Fund Administrator for the refusal to provide copies of the additional NEFs.

5) *Circumstances Surrounding the Litigation of SEC v BAC*

The New York Times reported the news regarding the Final Consent Judgment in this case as follows: [17]

In a ruling that freed Bank of America from some legal problems, a federal judge wrote on Monday that he had reluctantly approved a \$150 million settlement with the Securities and Exchange Commission... "This court, while shaking its head, grants the S.E.C.'s motion and approves the proposed consent judgment," the judge wrote.

Independent investigation of events surrounding the BAC-Merrill Lynch merger by State of New York Attorney General Andrew Cuomo was summed up in his April 23, 2009 letter to the US Congress. [19] Financial analysts' responded the release of the letter and its attachments under headlines such as "Let the Criminal Indictments Begin: Paulson, Bernanke, Lewis", "Bigger Than Watergate?", and "Cuomo Unveils Paulson, Bernanke, Lewis Conspiracy".

However, in contrast with such analysts' opinions, none of the perpetrators suffered any material consequences so far. Judge Jed Rakoff, who presided in the case, is considered one of the most experienced and notable among US judges in matters pertaining to securities, white-collar crime, and racketeering.

Regarding Judge Jed Rakoff's conduct in this case, the *Wall Street Journal Law Blog* said: [20]

Rakoff is currently proving himself to be, if nothing else, unafraid to single-handedly take on some heavyweight institutions and their lawyers.

Numerous attorneys appeared in the case, both for Plaintiff SEC - a government entity, and for Defendant BAC - a major financial institution. Over twenty Notices of Appearance appear in the PACER docket of the case.

In a September 22, 2009 report, the Washington Post quotes official statement by SEC:

"[W]e will vigorously pursue our charges against Bank of America and take steps to prove our case in court," the SEC said in a statement. "We will use the additional discovery available in the litigation to further pursue the facts and determine whether to seek the court's permission to bring additional charges in this case."

It is practically impossible that the prominent attorneys, who appeared in the case for both SEC and BAC, were unaware of the simulated nature of the litigation.

The litigation of this case was extensively covered by major US and international media outlets, as a key litigation under the current global financial crisis. A total of ten (10) reports of the litigation were found in the New York Times, eight (8) reports in the Washington Post, and dozens of reports in the Wall Street Journal. Likewise, fourteen (14)

reports related to the case were found in the Times of London. However, there is no reason to assume that any media, which reported on the litigation, ever tried, or gained access to records in the case beyond those accessible through the PACER docket, as described above. There also is no evidence that media ever reported that critical litigation records are missing. It is difficult to believe that experienced legal reporters of major media outlets never noticed the fatal flaws in the records and conduct of the litigation.

## IV. DISCUSSION

### A. Overall Conduct of the Litigation

The conduct of the US District Court in this matter should be reviewed in the context of the conduct of civil litigation as stipulated in the *Federal Rules of Civil Procedure*, and as outlined in the *Civil Litigation Management Manual, Second Edition* (2010) by the Judicial Conference of the United States. [18] Upon such review, a reasonable person would conclude that the litigation as a whole was never deemed by the US Court itself as valid litigation.

#### 1) Issuance and Service of Simulated Summons

The summons is a critical record - it establishes the onset of litigation and also establishes the jurisdiction of a particular court in a particular matter on particular parties. Accordingly, the *Federal Rules of Civil Procedure* prescribe that the summons be docketed by the clerk of the court and therefore become a public record. Moreover, the US Code prescribes that the summons be issued under the signature of the Clerk of the Court and under the Seal of the Court.

The invalidity of the summons in this case undermines the validity of the litigation as a whole. However, the invalidity of the summons in this case could not be discerned in PACER, the public access system.

Since the issuance of the summons is the very first action in any case, the issuance of a simulated summons in this case also shows that the case was designed to be simulated litigation from the very start, through collusion of the Judge, the Clerk of the Court, and the attorneys for SEC and BAC. In fact, the case was intended from the start to be an inverse show trial. [21]

#### 2) The Fairness Perspective

The outcome of the litigation should also be viewed from the fundamental fairness perspective: Individuals, who were banking executives, unlawfully took \$5.8 billion from the shareholders of BAC.

In response, SEC and BAC proposed, concomitantly with the filing of the complaint, the initial Settlement Agreement, which would have imposed a fine of \$33 million on the stockholders - the victims of the unlawful conduct.

Eventually, the outcome of the litigation was that pursuant to the final Settlement Agreement, compensation in the sum of \$150 million was paid by the shareholders to themselves. No funds were returned by any of the

perpetrators, and none of the perpetrators was held accountable for their unlawful conduct.

#### B. Human Errors, or Simulated litigation?

The conduct, documented in this study and in numerous other cases in the US district courts, the US courts of appeals, and the US Supreme Court cannot reasonably be deemed the outcome of human errors for the following reasons:

- Any valid and honest electronic record system of a courts must be secure enough, so that it would not enable unauthorized, unnamed persons, unbound by Oath of Office, to execute any transactions in the system.
- The authentication records, implemented in CM/ECF (the NEFs), bear neither the name, nor the authority and signature of the person, who issues the authentication record. Moreover, the NEFs are excluded from the data base of public records of the courts, and the courts deny access to these records in violation of First Amendment rights. There is no plausible explanation for such design of the systems and the universal denial of access to these records, which is consistent with integrity of the US courts.
- In all cases in the state and US courts, where simulated service of judicial records and their incorporation in the dockets was brought to the attention of the respective court, the courts refused to correct the dockets. Instead, the courts proceeded with the litigation of such cases, treating such simulated records as valid and effectual court records. [22,23] In doing so, the courts deliberately ignored the fact that the service of invalid judicial records and the publication of the same by the courts are the essence of the criminality, here referred to as “Simulating Legal Process”, [13] and historically known as “Fraud on the Court”. [24]

#### C. Transparency of the judicial process – public access to court records.

Court records are public records pursuant to the US law – the First Amendment. The landmark decision in this matter by the US Supreme Court in *Nixon v Warner Communications, 1978*, pertaining to the Nixon tapes, explicitly states that it only re-affirms existing law in this regard, and that public access to court records is essential, in order to enable to People “to keep a watchful eye on government” (including, but not limited to the judiciary). As documented in this case and numerous others, today public access to court records in the United States is selective.

A major claim of this study is that the selective denial of public access to court records has been enabled in recent decades through the implementation of invalid electronic record systems in the courts. It effectively amounts to establishment of “double books” systems in the courts – in the US courts – PACER and CM/ECF. [25]

#### D. Missing Court Records – Cardinal Sign of Judicial Corruption.

United Nations reports on “Strengthening Judicial Integrity” advocate the implementation of electronic record systems in the courts, as a tool for enhancing the transparency and integrity of the courts. [29,30] However, the same United Nations reports list missing court records as a cardinal sign of judicial corruption.

In the case of PACER and CM/ECF, the implementation of invalid electronic record systems in the courts enables the conduct of litigation, where critical records are permanently missing, as demonstrated in the current study.

#### E. Banking Regulation

Conduct of the SEC, BAC, and the US District Court, Southern District of New York, as documented in the current study, stands contrary to ongoing efforts by the US Congress and repeated statements by the US Government, regarding efforts to restore the integrity of Banking Regulation in the United States and enhance the accountability of directors, executives, accountants, and attorneys, acting on behalf of corporations. In the wake of the Enron scandal, the US Congress passed the *Sarbanes-Oxley Act (2002)*, in order to enhance the accountability of corporate officers, attorneys, and accountants. In the wake of the current financial crisis, the US Congress passed the *Fraud Enforcement and Recovery Act (2009)*. SEC and other Banking Regulators routinely appear before the US Congress and provide testimonies, which claim that integrity of Banking Regulation in the United State has been “shored up”.

The US Government was also pressured by the international community, which was seriously harmed by the ongoing financial crisis, to take corrective measures, consistent with the US Government’s duties and obligations in international treaties and accords.

In contrast, the litigation of *SEC v BAC* in the US Court, Southern District of New York, reviewed in the current report, was as merely simulated litigation, and fraud on the People of the United States and the international community by the US District Court and the US government. This study also documents the tight link between integrity of the US courts, or lack thereof, and the failure of US banking regulation.

#### F. PACER and CM/ECF, Information Systems of the US Courts

The case, reviewed in the current study, documents the critical effect of PACER and CM/ECF, the electronic records systems of the US courts, on to integrity, or lack thereof, of US court records and the US justice system in general.

Conditions that today prevail in the US courts stand in stark contrast with the laws enacted by US Congress, Presidential Directives, Regulations, and applications, which have been presumably implemented for

authentication and validation of electronic government records in the United States. [26, 27]

Deficiencies in the design and operation of PACER and CM/ECF were previously noted in reports, which were published by others and by this author in legal, criminology, and computer science journals. [1, 8-10] The report in ProPublica, copied in the *National Law Journal* documented the falsification of records in a landmark case of international significance – the Habeas Corpus petition of a Guantanamo detainee in the US District Court, Washington DC. Such conduct should have been prevented, or made obvious by a valid electronic record system of the courts.

Reports regarding the deficiencies in PACER and CM/ECF have also been repeatedly forwarded to the appropriate US government agencies. [10] Regardless, there is no evidence of intent to initiate corrective actions.

#### G. *The NEFs as Certificates of Authentication – a Case of “Robo-signers”*

Of particular concern is the design and operation of the NEFs, the certificates of service in CM/ECF.

Beyond the design of the electronic form itself, as described above, the universal exclusion of the NEFs from public access has no plausible explanation that is consistent with integrity of the courts.

The opening statement on the NEF says:

“This is an automatic e-mail message generated by the CM/ECF system.”

Therefore, the overall design of the NEF, as a Certificate of Service, is comparable to systems, which have been reported in recent years in the banking system, as one of the causes of the financial crisis, and have been dubbed “Robo-signers”.

The NEF is an electronic record that purports to provide certification of critical court records. In fact, it provides no certification at all and implies accountability by no individual.

#### H. *The Electronic Documents Stamps – invalid either as a digital signatures or as a checksum strings*

As described above (Figures 1,2; see Online Appendix 1), the Electronic Document Stamp in the NEFs replaced the hand-signature of the Clerk of the Court in the Certificates of Service. However, the Stamp is a checksum string, and as such, cannot be deemed an electronic signature of any authorized, named individual. Moreover, the public is denied access to the NEFs.

The CM/ECF User Guide of the US District Court, Northern District of Illinois is unique among such user guides, which have been surveyed. It provides detailed description of a Document Verification Utility, which permits the CM/ECF user to verify a given PACER record against the Stamp in the respective NEF. (Figure 5; see Online Appendix 1) [28] However, the public is also denied access to the Document Verification Utility. Had the public been permitted access to the NEFs and the Document

Verification Utility in the US District Court, Washington, DC, it would have provided definitive evidence for the adulteration of the Order in the Guantanamo Bay Habeas Corpus case, even absent to the two materially different order records, recently reported by the *National Law Journal*. [1]

There is no plausible explanation for such design of PACER and CM/ECF and conduct of the US courts in this regard that is consistent with integrity of the US courts.

#### I. *Data Mining of Judicial Records*

This study highlights the significance of data mining of judicial records and other records of the justice system (e.g., prisoners’ registration systems [8]). The integrity of these systems is critical for the safeguard of Human Rights and Civil Society, and their corruption bears a profound impact, which should be considered an unannounced regime change. This study also demonstrates that although the courts today deny access to key records, in violation of the law, through data mining, the fraud in such systems can still be elucidated.

Obviously, key data to be mined are elements related to graphic signatures, electronic signatures, authentication records, names and authorities of individuals involved in issuing the various records.

Beyond the documentation of the invalidity of specific records, data mining provides evidence of the invalidity and fraud in the design and operation of such systems as a whole.

#### J. *The fraud inherent in the electronic record systems of the US courts is not unique.*

Sustain, the electronic record system of the Superior Court of California, County of Los Angeles, is believed to be one of the earliest electronic record system of any court (implemented around 1985). According to the web page of its maker, the Sustain Corporation, the system is by now implemented in the courts of eleven states and three nations. Sustain shows remarkably similar fraudulent features to those described here in PACER and CM/ECF.

An accompanying paper describes the electronic record systems of the courts of the State of Israel, which were implemented a decade later than PACER and CM/ECF. The Israeli systems also show remarkable similarity to the fraud inherent in PACER and CM/ECF.

Preliminary inspection suggests that similar faults also exist in the electronic record systems, which have been recently implemented in other “Western Democracies”.

#### K. *Desired Corrective Actions*

Deficiencies in PACER and CM/ECF, which were outlined in this study, are not inherent to electronic records systems. On the contrary, such systems could have enhanced integrity and transparency of the courts and the judicial process.

- 1) *Computing Experts in General, and Data Mining Experts in Particular, Should Assume a Unique Civic Duty in the Ongoing Monitoring of the Integrity of the Electronic Record Systems of the Courts.*

The common law right to inspect and to copy judicial records was reaffirmed by the US Supreme Court in *Nixon v Warner Communications, Inc* (1978) as inherent to the First Amendment. In doing so, the US Supreme Court said that the right was necessary for the public "to keep a watchful eye on government". Today, the public must keep a watchful eye particularly on the courts' electronic record systems. Computing experts in general and data mining experts in particular are uniquely equipped to exert such "watchful eye" on the courts. No other measures could substitute for public scrutiny of the courts in safeguarding Human Rights and Civil Society in the Digital Era.

- 2) *Procedures Inherent to the Design and Operation of PACER and CM/ECF Should be Established by Law and Validated by Computing Experts under Public and Legal Accountability.*

Implementation of PACER and CM/ECF should be recognized as an act of establishing novel court procedures. Therefore, their implementation should have been established by law. Validation (functional logic verification) of such systems should have been undertaken prior to their installation, in a manner that is both legally and publicly accountable, e.g., through agencies under control of the legislative branch. As part of validation, adequate security should be ascertained, to ensure that only named, authorized court personnel is permitted to conduct docket transactions. The identity and authority, as well as digital signatures of such persons should be publicly and unambiguously discernable. Thereby, accountability of the clerks of the courts for integrity of electronic court records should be restored.

- 3) *Valid Authentication Procedures and Authentication Records Should be Implemented*

As detailed above, the NEFs cannot possibly be deemed valid electronic Certificate of Service, and the Electronic Document Stamp was implemented in CM/ECF in a manner that prevents the public from ascertaining the integrity, or lack thereof, of US court records. A publicly recognized and publicly accessible form of valid digital signatures should be implemented instead.

- 4) *Public Access to Judicial Records, to Inspect and to Copy, Should be Restored.*

Given that today PACER is effectively the exclusive way, provided by the US courts, for public access to court records, all court records, including the electronic Certificates of Service, should be publicly accessible online, pursuant to the First Amendment, Due Process, and Public Trial rights. Such access should be denied only when explicitly stipulated by law or through fully documented sealing orders.

- 5) *US judges and clerks should be required to post financial disclosures on an annual basis.*

Given the serious concern of bribing of judges and clerks by corporate and other financial interests, judges and clerks should be required to post their financial disclosures on an annual basis. Similar measures were instituted in California for various elected public officials, and also for police officers of the undercover narcotics unit of the Los Angeles Police Department, given substantial evidence of widespread public corruption.

## V. CONCLUSIONS

Litigation of *SEC v BAC* (1:09-cv-06829) in the US District Court, Southern District of New York, was hailed by media as the hallmark of banking regulation in the wake of the global financial crisis. The current study finds critical records of the litigation missing, others - outright invalid, simulated records, and others - vague and ambiguous to the degree that the litigation as a whole cannot be reasonably deemed valid litigation. Instead, the evidence shows that the case was conducted as simulated litigation in the US District Court, Southern District of New York, from its onset. To a large degree, such conduct was enabled through the design and operation of PACER and CM/ECF, the electronic record systems of the US courts. Key defects in PACER and CM/ECF, which were demonstrated in the current report, pertain to digital signatures, authentication records, authorities, security, public access, and functional logic verification of the systems as a whole.

PACER and CM/ECF are invalid electronic records systems of the US courts.

This study is also a call for action by computing experts in general and data mining experts in particular for the safeguard of Human Rights and integrity of government in the Digital Era.

## VI. ONLINE APPENDICES

- [1] This complete paper, including Figures 2-5, is accessible at: <http://www.scribd.com/doc/104880125/>
- [2] The complete PACER docket, additional relevant records in litigation of *SEC v BAC* (1:09-cv-06829), and detailed analysis of specific records are accessible at: <http://www.scribd.com/doc/44663232/>

## VII. ACKNOWLEDGMENT

The author thanks Israeli computing/cryptology and legal experts for their assistance.

## VIII. REFERENCES

- [1] D. Linzer, "In GITMO Opinion, Two Versions of Reality", *The National Law Journal*, October 11, 2010.
- [2] J. Zernik, 'Data Mining of Online Judicial Records of the Networked US Federal Courts', *1 International Journal on Social Media: Monitoring, Measurement, Mining* 1:69-83, 2010.
- [3] A. Field, "Foreclosure fraud: The homeowner nightmares continue", CNN, April 7, 2011.

- [4] Daily Koss, "60 Minutes Exposes Massive Foreclosure Fraud" April 11, 2011.
- [5] G. Morgenson, "From East and West, Foreclosure Horror Stories", New York Times, January 7, 2012.
- [6] G. Morgenson and L. Story, "In Financial Crisis, No Prosecutions of Top Figures", New York Times, April 14, 2011.
- [7] S. Paltrow, "Special Report: The watchdogs that didn't bark," Reuters, December 11, 2011.
- [8] The following paper details retaliation against the 70-year old, former US prosecutor Richard Fine, who exposed, publicized, and rebuked the large-scale bribing of the judges of the Superior Court of California, County of Los Angeles - the largest county court in the United States. His actions led to the signing of "retroactive immunities" (simulated pardons) to all judges of the California courts by the California Governor - in fact an admission of widespread criminality. Two weeks later, Richard Fine was arrested. He was falsely imprisoned for 18 months in solitary confinement (considered by the United Nations torture). His electronic prisoner's booking record listed him as arrested and booked on location and by authority of the "Municipal Court of San Pedro". Such court did not and does not exist. Richard Fine's Habeas Corpus petitions were subjected to simulated review in the US District Court, Central District of California, the US Court of Appeals, 9<sup>th</sup> Circuit, and the US Supreme Court.
- J. Zernik, "Habeas Corpus in the United States - the case of Richard Isaac Fine - a Review" (2010); retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/24729084/>
- [9] The following papers detail simulated litigation in *Citizens United v Federal Election Commission* - a landmark case in the US District Court, Washington DC, and in the Supreme Court of the United States. The case is considered by some legal experts as an open invitation by the US Supreme Court for the corruption of the US government. The Supreme Court docket in this case lists "judgment issued", but no judgment record is to be found in the online electronic records of the Supreme Court and no judgment record was found by the Federal Election Commission in response to *Freedom of Information Act* request.
- J. Zernik, "*Citizens United v Federal Election Commission* (1-07-cv-2240) in the US District Court, DC - invalid court records in a case of Simulated Litigation" (2011); retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/56080106/>
- J. Zernik, "*Citizens United v Federal Election Commission* in the US Supreme Court - so far only a simulated Judgment record has been discovered..." (2011); retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/55613401/>
- [10] The following papers includes a list of US judges and respective cases of simulated litigation in the US district courts, the US courts of appeals, and the US Supreme Court, with links to detailed review of each:
- W. Windsor and J. Zernik, "Request filed by Windsor and Zernik with US Attorney General Eric Holder for Review of Integrity of Public Access and Case Management Systems of the US Courts" (2011); retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/59480718/>
- J. Zernik, "Evidence of widespread corruption of the US courts and proposed corrective measures submitted to the US House of Representatives"; retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/85481555/>
- [11] J. Bohm, "Memorandum Opinion", in *Case of Borrower Parsley* (05-90374), US Bankruptcy Court, Southern District of Texas, Dkt #248, March 5, 2008; retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/25001966/>
- [12] P. Carrizosa, "RE: Engagement of Attorney McCormick in *Fine v Sheriff* (2:09-cv-01914) in the US District Court, Central District of California", March 19, 2010 Letter on behalf of the California Judicial Council"; retrieved: September 4, 2012; accessible at: <http://www.scribd.com/doc/28645522/>
- [13] The terms "Simulated litigation", "simulated decisions", "simulated service", etc are used in this paper as defined in the Texas Penal Code:
- Texas Penal Code §32.48. SIMULATING LEGAL PROCESS.
- (a) A person commits an offense if the person recklessly causes to be delivered to another any document that simulates a summons, complaint, judgment, or other court process with the intent to:
- (1) induce payment of a claim from another person; or
  - (2) cause another to:
    - (A) submit to the putative authority of the document; or
    - (B) take any action or refrain from taking any action in response to the document, in compliance with the document, or on the basis of the document.
- (b) Proof that the document was mailed to any person with the intent that it be forwarded to the intended recipient is a sufficient showing that the document was delivered.
- The same conduct is defined in the penal codes of some other states as "sham litigation". In the US Code the same conduct is prohibited under the *Racketeer Influenced and Corrupt Organization Act* (RICO).
- [14] US District Court, Southern District of New York, "Local Rules and ECF Rules and Instructions" (2010).
- [15] W. Anderson, "Anderson on Civil E-Filing in the Central District of California: The Unofficial Civil E-filing User Manual", 2008.
- [16] Securities and Exchange Commission, "September 9, 2010 FOIA Response No 10-03964-FOIA, RE: *SEC v Bank of America Corporation* (1:09-cv-06829)"; retrieved September 4, 2012; accessible at: <http://www.scribd.com/doc/46608559/>
- [17] L. Story, "Judge Accepts S.E.C.'s Deal With Bank of America", *New York Times*, February 22, 2010.
- [18] Judicial Conference of the United States, Committee on Court Administration and Case Management, "Civil Litigation Management Manual", 2nd Edition (2010).
- [19] A. Cuomo, "Re: Bank of America - Merrill Lynch Merger Investigation," April 23, 2009, linked to: D. Cho and T. Tse "U.S. Forced Bank Board To Carry Out Merrill Deal," *Washington Post*, April 24, 2009
- [20] A. Jones, "Rakoff Hands It to BofA, the SEC.," *Law Blog, The Wall Street Journal*, August 11, 2009
- [21] The term "show trials" originally referred to certain trials in the Soviet Union. Show trials are described in Wikipedia as follows:
- The term **show trial** is a pejorative description of a type of highly public trial in which there is a strong connotation that the judicial authorities have already determined the guilt of the defendant. The actual trial has as its only goal to present the accusation and the verdict to the public as an impressive example and as a warning.

Show trials tend to be retributive rather than correctional justice. The term was first recorded in the 1930s.

The term "inverse show trial" here refers to the practice in the US today - conducting simulated litigation in cases, where the goal is to publicly exonerate certain individuals after their criminality has been publicly exposed, e.g., government officers and bankers.

- [22] J. Zernik, "Motion to Intervene and Concomitantly Filed Papers," in *Log Cabin Republicans v USA et al* (10-56634) in the US Court of Appeals, 9th Circuit Dkt #39-47, January 7, 2011; retrieved September 4, 2012; accessible at: <http://www.scribd.com/doc/46516034/>
- [23] J. Zernik, "Amended Request for Correction of US Supreme Court Records" in *Fine v Sheriff* (09-A827); retrieved September 4, 2012; accessible at: <http://www.scribd.com/doc/30162109/>
- [24] In *Bulloch v. United States*, 763 F.2d 1115, 1121 (10th Cir. 1985), the court states "Fraud upon the court is fraud which is directed to the judicial machinery itself and is not fraud between the parties or fraudulent documents, false statements

or perjury. ... It is where the court or a member is corrupted or influenced or influence is attempted or where the judge has not performed his judicial function --- thus where the impartial functions of the court have been directly corrupted."

- [25] J. Zernik, "Through Implementation of Case Management Systems, the California and the US Courts Rendered the Judicial Process Vague and Ambiguous"; retrieved September 4, 2012; accessible at: <http://www.scribd.com/doc/46519282/>
- [26] *E-Sign Act* (2000), USA
- [27] *E-Government Act* (2002), USA
- [28] US District Court, Northern District of Illinois, "CM/ECF Ver4.0 User Guide", undated.
- [29] United Nations Drug Control and Crime Prevention Center, "Report of the First Vienna Convention - Strengthening Judicial Integrity, CICP-6" (2000).
- [30] United Nations Drug Control and Crime Prevention Center, "Strengthening Judicial Integrity Against Corruption CICP-10" (2001)