

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN AIRLINES, INC.,
Petitioner

v.

ADVANCED TRANSACTIONS, LLC
Patent Owner

U.S. Patent No. 7,065,555 B2
Issue Date: June 20, 2006

Title: SYSTEM AND METHOD RELATED TO GENERATING AND TRACKING
AN EMAIL CAMPAIGN

DECLARATION OF ERIC COLE, PH.D.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

TABLE OF CONTENTS

I.	QUALIFICATIONS	1
II.	SCOPE OF WORK.....	9
III.	BASIS FOR OPINIONS	9
	A. Level of Ordinary Skill in the Art	10
	B. Obviousness.....	12
IV.	OVERVIEW OF THE CHALLENGED PATENT.....	15
	A. U.S. Patent No. 7,065,555 B2 (the '555 patent)	15
	B. Assumed Effective Filing and Invention Dates	21
V.	PRIOR ART REFERENCES	21
	A. Bergh (Ex.1002).....	21
	B. Calloway (Ex.1003).....	27
	C. Lerner (Ex.1004)	52
	D. Nagda (Ex.1005)	56
VI.	Application of Prior art to Challenged Claims	61
	A. Ground 1: Claims 1-6 and 9-15 are obvious over Bergh in view of Nagda	61
	1. Claim 1	63
	2. Claim 2	73
	3. Claim 3	75
	4. Claim 4	79

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

5.	Claim 5	80
6.	Claim 6	81
7.	Claim 9	83
8.	Claim 10	86
9.	Claim 11	89
10.	Claim 12	93
11.	Claim 13	103
12.	Claim 14	105
13.	Claim 15	106
B.	Ground 2: Claims 1-6 and 9-15 are obvious over Calloway in view of Nagda	107
1.	Claim 1	108
2.	Claim 2	115
3.	Claim 3	117
4.	Claim 4	122
5.	Claim 5	123
6.	Claim 6	125
7.	Claim 9	126
8.	Claim 10	129
9.	Claim 11	133
10.	Claim 12	136

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

11.	Claim 13	144
12.	Claim 14	145
13.	Claim 15	146
C.	Ground 3: Claims 7-8 and 16-17 are obvious over Calloway in view of Lerner.....	147
1.	Claim 7	149
2.	Claim 8	153
3.	Claim 16	158
4.	Claim 17	160
VII.	CONCLUSION.....	164

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

I, Eric Cole, of Ashburn, Virginia, declare that:

I. QUALIFICATIONS

1. My academic credentials include a master's degree in computer science and a doctorate in information security, and I have worked in the cyber and technical information security industry for over twenty-five years. The details of my education and experience are summarized in my curriculum vitae ("CV"), which is attached as Exhibit 1007. My CV also includes a list of my publications over the past ten years.

2. I have worked in computer security for over twenty-five years. To briefly summarize my career, I have: 1) been responsible for the security of sensitive government projects; 2) managed security at major private sector companies; 3) consulted for major private sector companies; 4) been actively involved in designing, building, and deploying intrusion detection systems; 5) worked on protecting and securing critical information including trade secrets; 6) continually taught and written about cybersecurity.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

3. I am the founder and president of Secure Anchor Consulting, LLC, located in Ashburn, Virginia. Secure Anchor Consulting provides cybersecurity consulting services and lead research and development initiatives to advance information systems security. Many of the clients I work with are responsible for protecting sensitive client and/or consumer information and implementing effective security.

4. At Secure Anchor Consulting, I also actively work on incidents, and I have a detailed understanding of measures that organizations can take to both prevent and detect breaches. In addition, I have worked with organizations to design, build, and implement security measures that would be classified as both fixes and compensating controls, and I have detailed knowledge of the effort that is required to implement various remediation measures.

5. I worked for the U.S. government for eight years as an employee and have held various contracting jobs with government agencies, which involved working with classified information. I have worked for a wide range of government organizations, including the Federal Bureau of Investigation (FBI), the National

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Security Agency (NSA), the Central Intelligence Agency (CIA), the Department of Energy, the Department of Defense (DOD), the Treasury Department, the Secret Service, and the Nuclear Regulatory Commission (NRC). I have held various top-secret security clearances with the DOD, the CIA, and the NRC. I also was involved in funded research from the Defense Advanced Research Projects Agency (DARPA), an agency of the DOD responsible for the development of new intrusion detection technologies for use by the military. During this time, I have reviewed, edited, and created numerous security policies. On several occasions, I have also reviewed the reasonableness of measures intended to protect and secure Confidential Information through various types of documentation to include policies, procedures, standards, and baselines.

6. While serving as a Senior Officer for the CIA as Program Manager / Technical Director for the Internet Program Team with the Office of Technical Services, I implemented the Internet Program Team that designs, develops, tests, and deploys internet security products in three- to six-month intervals. In this role, I

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

received a letter of appreciation from the Director of Central Intelligence and six Exceptional Performance Awards.

7. As a member of the Information Security Assessment Team with the Office of Security, I evaluated and performed security assessments of network operating systems to identify potential vulnerabilities and solutions. I also designed a large-scale auditing system with an automated review capability and worked on several virus investigations for the Office of Security.

8. In my role as Chief Information Officer for the American Institutes for Research, I repaired and developed IT infrastructures for various organizations. I was also responsible for building out the entire data classification program to ensure that critical and proprietary data was properly protected and secured. I was also one of the principal leads on research funding from DARPA. In this role, I was responsible for understanding the current state of the art in intrusion detection and designing and building a new cybersecurity system that could catch attacks that were targeting organizations.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

9. As Chief Scientist and Senior Fellow for Lockheed Martin, I performed research and development in information systems security. I also specialized in evaluating and designing secure network design, perimeter defense, vulnerability discovery, penetration testing, and intrusion detection systems. At Lockheed Martin, I served as a technical advisor in high-profile security projects for government clients including the DOD, the FBI Sentinel case management systems, Department of Homeland Security Enterprise Acquisition Gateway for Leading Edge solutions, Jet Propulsion Labs, Hanford Labs, and FBI Information Assurance Technology Infusion programs.

10. As Chief Technical Officer for McAfee, I executed the strategy for technology platforms, partnerships, and external relationships to establish product vision and achieve McAfee's goals and business strategies. In this capacity, I worked closely with groups tasked with the development of intellectual property. While at McAfee, I worked with many business customers responsible for protecting clients' information, helping them implement effective security solutions.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

11. I was a fellow and instructor for twenty years with the SANS Institute, a research and education organization consisting of information security professionals. SANS is the largest source for information security training and security certifications in the world. I am an author of several security courses, such as SEC401-Security Essentials and SEC501-Enterprise Defender. SEC401-Security Essentials is a required course for agents of the FBI and the NSA. These courses have been taken by over 30,000 people, and I have taught more than 50% of these students via live and online training. The courses that I have written have multiple modules and lessons on security policies, employee agreements, and protection of intellectual property. As one of the top-rated instructors at SANS, I have delivered keynote addresses around the world.

12. I am a member of the European InfoSec Hall of Fame, a professional membership awarded by nomination and election by a panel of industry experts.

13. I hold a Certified Information System Security Professional (CISSP) certification and was the creator of the Global Information Assurance Certification (GIAC) Security Essentials Certification (GSEC).

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

14. I am a contributing author of “Securing Cyberspace for the 44th President” and served as a Commissioner on cybersecurity for President Obama. My Nine books on cybersecurity include “Online Danger,” “Network Security Bible - 2nd Edition,” “Advanced Persistent Threat,” and “Insider Threat,” which have become recognized as industry-standard sources. They are used in many classrooms and colleges around the world as authoritative texts on cybersecurity. I have also published several articles in the field.

15. The focus of my work over the last ten years has been on data protection for commercial organizations. I am very familiar with best practices in cybersecurity and have developed many of the standard practices.

16. Today, my consulting efforts help organizations properly protect client information and relate to various alternative methods of security that can be implemented. This includes hardening of systems, securing servers, proper configuration, patching, and compensating controls. In cases where a fix cannot be made because it would negatively impact the business, I have extensive experience

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

in understanding various compensating controls as an alternative to minimize the risk to an acceptable level and how to implement those controls.

17. I routinely help clients develop and implement company-wide policies, training, and best practices to prevent potential cybersecurity incidents. My work addresses threats from both internal and external sources, including accidental and intentional incidents.

18. I have led, and been involved in working on, responses to many cybersecurity incidents. This includes performing root cause analysis, verifying the reasonableness of security measures, and validating the implementation of additional remediation measures.

19. In my consulting work and in the various positions that I have held, I have been responsible for protecting organizations to minimize and prevent data breaches, in addition to responding to breaches post detection. I have a very detailed understanding of what is and is not a reasonable level of security based on the hundreds of organizations with which I have worked and the various security task forces with which I have been involved.

II. SCOPE OF WORK

20. I have been asked to consider and provide my opinions on the claims of U.S. Patent No. 7,065,555 B2—the Challenged Patent—including the technical subject matter and the application of various references that predate the priority date of the patent. In particular, I have been asked to consider what one of ordinary skill in the art would have understood from the claims and specification of the Challenged Patent, whether certain references disclose or suggest the features recited in the claims of the Challenged Patent, and whether one of ordinary skill in the art would have had reason to combine certain references to arrive at the claimed subject matter.

21. I am compensated at a rate of \$800/hour for my work. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of any proceeding.

III. BASIS FOR OPINIONS

22. My opinions set forth below are based on my education, training, experience, and the content of the references considered. I have considered the available prior art, the '555 patent in its entirety, the prosecution history of the '555

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

patent, and the general knowledge of those familiar with the field of email marketing around April 2001. I also considered the exhibits and any other materials cited herein.

A. Level of Ordinary Skill in the Art

23. My opinions are provided based on what a person of ordinary skill in the art in the technical field of the purported invention would have understood at the time of the purported invention of the Challenged Patent.

24. I have been informed and understand that the content of a patent and prior art should be interpreted the way a person of ordinary skill in the art would have interpreted those references at the time of the invention of the patent. I understand that the person of ordinary skill is a hypothetical concept referring to one who thinks along the lines of conventional wisdom at the time.

25. I was asked to provide an opinion as to the level of one of ordinary skill in the art pertinent to the subject matter set forth in the Challenged Patent at the time of the priority date. Around April 2001, it is my opinion that a person of ordinary skill in the art in the field of the Challenged Patent would have been a person with a

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

bachelor's degree in computer science, computer engineering, or electrical engineering and at least three years of experience in networking operating systems and cybersecurity, or a person with a master's degree in one of the foregoing and at least two years of experience in the aforementioned fields. Throughout this declaration, I use the term "POSITA" to refer to a person with these or similar qualifications. To have similar qualifications, an individual with additional education or additional industrial experience could still be of ordinary skill in the art if that additional education or experience compensates for a deficit in one of the other aspects of the requirements stated above.

26. The basis for my familiarity with the level of ordinary skill is my interaction with large numbers of workers in the computer security industry who were at this level of skill. In reaching this opinion as to the hypothetical person of ordinary skill in the art, I have considered the types of problems encountered in the art, the prior art solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology, and the educational level and professional capabilities of workers in the field.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

B. Obviousness

27. I have been informed and understand that subject matter claimed in a patent is obvious under 35 U.S.C. § 103 if a person of ordinary skill in the art at the time the alleged invention was made would have had reason to combine or modify the disclosures of one or more prior art references to arrive at the claimed subject matter. A claim may be unpatentable even if each and every claim limitation is not present or disclosed in a single prior art item.

28. I have been informed and understand that, under the doctrine of obviousness, a claim is unpatentable if the differences between the invention and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. A person of ordinary skill in the art is presumed to have knowledge of the relevant prior art at the time of the claimed invention.

29. I have been informed and understand that obviousness is based on the scope and content of the prior art, the differences between the prior art and the claim,

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

the level of ordinary skill in the art, and secondary indicia of obviousness and non-obviousness to the extent such indicia exist.

30. I have been informed and understand the determination of whether the asserted claims would have been obvious to a person of ordinary skill in the art and, therefore, invalid is not governed by any rigid test or formula. A determination that a claim is obvious is, instead, based on a common-sense determination that the claimed invention is merely a combination of known limitations to achieve predictable results. Any of the following rationales are acceptable justifications to conclude that a claim would have been obvious: (1) the claimed invention is simply a combination of known prior art methods to yield predictable results; (2) the claimed invention is a simple substitution of one known element for another to obtain predictable results; (3) the claimed invention uses known techniques to improve similar devices (methods or products) in the same way; (4) the claimed invention applies a known technique to a known device (method or product) ready for improvement to yield predictable results; (5) the claimed invention was “obvious to try”—choosing from a finite number of identified, predictable solutions with a

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

reasonable expectation of success; (6) there is known work in one field of endeavor that may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; or (7) there is some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill in the art to modify the prior art reference to combine prior art teachings to arrive at the claimed inventions.

31. I have been informed and understand that a claim may be obvious in light of a single reference, without the need to combine references, if the elements of the claim that are not found in the reference can be supplied by the common sense or knowledge of one of ordinary skill in the art or taught in different areas of the single reference.

32. I have been informed and understand that an analysis of whether a claimed invention is obvious must not rely on a hindsight combination of prior art. The analysis must proceed in the context of the time of the invention or claimed priority date and consider whether the invention as a whole would have been obvious

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

to a person of ordinary skill in the art, taking into consideration any interrelated teachings of the prior art, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine any known elements in the fashion claimed by the patent at issue.

IV. OVERVIEW OF THE CHALLENGED PATENT

A. U.S. Patent No. 7,065,555 B2 (the '555 patent)

33. The '555 patent “is directed to marketing via email, and, in particular, to generating and tracking marketing related email.” Ex.1001 (1:11-13). I have considered its file history, attached as Exhibit 1008, including the examiner’s rejections. The examiner initially rejected the '555 patent’s claims as obvious over U.S. Patent No. 5,937,162 (Funk) and Funk in view of U.S. Patent No. 5,937,162 (Melchione), U.S. Patent No. 6,360,254 (Linden), and U.S. Patent No. 6,377,936 (Henrick). Ex.1008 at 107-113. Applicants amended their claims to further limit how the “email campaign template” is generated, including requiring that “a

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template” be used. Ex.1008 at 90. Applicants argued to the examiner that the configuration-file limitation overcame the examiner’s rejections. Ex.1008 at 97. The examiner rejected that the configuration-file limitation rendered the claims non-obvious over Funk. Ex.1008 at 72. Applicants primarily responded that “Funk fails to teach or suggest *sending to each of the at least one email target a corresponding custom email, wherein the custom email is formed from the email campaign template*, as set forth in Applicants’ claim 1.” Ex.1008 at 59. The examiner apparently accepted Applicants’ argument and later issued the ’555 patent. Ex.1008 at 41. Even so, nothing in the file history suggests that the examiner considered the prior art I discuss herein. Ex.1008 at 43; Ex.1001 at References Cited. And as I explain below, the prior art I discuss herein discloses or suggests the ’555 patent’s configuration-file limitation as well as forming custom emails from it. As issued, the ’555 patent claims “[a] method and system for generating and tracking an email campaign.” Ex.1001 at Abstract. The specification further explains that “an email campaign” is used “for sending email

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

to a target set of email addresses for purposes such as marketing, information acquisition, and otherwise.” Ex.1001 (1:21-22, 1:25).

34. The ’555 patent explains that “[t]he ability to market a product or service to individuals who are accessible on the Internet is becoming increasingly important.” Ex.1001 (1:15-17). To that end, “[e]ffective ways of contacting these individuals are being sought.” Ex.1001 (1:17-18). While “[e]mail campaign[s]” then existed, *see* Ex.1001 (1:20-25), they “suffer[ed] from difficulties in locating a pool of relevant individuals to be contacted,” Ex.1001 (1:26-27). “[E]ach email sent is critical to the success of the campaign, and needs to be carefully created.” Ex.1001 (1:28-29). That causes “increased difficulty” when an email campaign requires a “large number” of “email messages” to be sent. Ex.1001 (1:31-33). And, once “initiated, difficulties in measuring success of the email campaign are presented.” Ex.1001 (1:34-36).

35. For those reasons, the ’555 patent explains, “[e]ffective ways for determining whether email recipients have received email from the email campaign,” and “for allowing the email recipients to provide feedback have . . . been

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

sought.” Ex.1001 (1:36-39). And it was likewise “desirable for the email recipients to be able to respond with feedback, and for the quantity and content of the responses to be monitored and tracked.” Ex.1001 (1:40-42). In sum, according to the ’555 patent, “what is needed is an efficient way to create and track a email campaign [sic].” Ex.1001 (1:43-44).

36. The specification further describes the system of its purported “invention” as including:

An email campaign generator generates an email campaign template from an email target database. The email target database includes at least one email target. An email campaign engine generates a custom email corresponding to each of the email targets in the email target database. The custom email are formed from the email campaign template. The email campaign engine sends each custom email to the corresponding email target. A campaign tracker receives at least one response corresponding to one or more of the sent custom email. The

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

campaign tracker creates a campaign tracking list that includes the
received at least one response.

Ex.1001 (1:48-60).

37. The specification further describes the method of its purported
“invention” as including:

The present invention is further directed to a method for an email
campaign. An email target database is received. An email campaign
template related to at least one email target in the received email target
database is generated. An email customized for each email target is sent
to the respective email target. Each customized email is formed from
the email campaign template. The sent custom email is tracked.

Ex.1001 (1:61-67).

38. The specification further describes that:

The email campaign template can be generated by generating a message
template, and generating a configuration file to contain data related to
each email target. The data for each email target is insertable in the

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

generated message template. The data may include a custom resource locator address. The custom uniform resource locator (URL) address can be generated for each email target. The generated custom URL address for each email target is inserted into the configuration file. A message authentication code can be generated for each email target. All or a portion of the generated message authentication code for each email target can be appended to a host web address to form the custom URL address for each target.

Ex.1001 (2:1-13).

39. The specification further describes that “[f]urther features and advantages of the invention as well as the structure and operation of various embodiments of the present invention are described in detail below with reference to the accompanying drawings.” Ex.1001 (2:14-17).

B. Assumed Effective Filing and Invention Dates

40. The face of the '555 patent states that its application was filed on April 25, 2001. Ex.1001 at Cover. I thus assume that date is the '555 patent's earliest priority date.

V. PRIOR ART REFERENCES

A. Bergh (Ex.1002)

41. Bergh is U.S. Patent No. 8,533,038 B2. It is entitled "Offer Delivery System." Bergh's non-provisional application was filed on February 5, 2001. As a continuation in part, Bergh claims priority to U.S. Application No. 09/575,283's May 22, 2000 filing date. Bergh claims priority to U.S. Provisional Application No. 60/135,521, which was filed on May 21, 1999. Bergh also claims priority to U.S. Provisional Application No. 60/180,254, which was filed on February 4, 2000. Ex.1002 at Cover. I therefore assume Bergh's priority date is May 21, 1999, which is earlier than the '555 patent's.

42. Bergh "relates to a system for managing and distributing offers." Ex.1002 (1:18-19). Bergh notes that "[m]any organizations currently use traditional marketing channels, such as direct mailings, and increasingly electronic delivery,

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

such as electronic mail (email) or the World Wide Web, for delivery of advertising and sales offers to its customers or potential customers.” Ex.1002 (1:20-24).

43. That raises a number of problems, according to Bergh. Because “offers to a particular customer may originate from different parts of the organization,” “[t]here is the potential that offers to that customer from these different parts of the organization or through different channels may conflict in some way, thereby reducing the effectiveness of the communication with that customer.” Ex.1002 (1:24-30); *see also* Ex.1002 (1:44-47) (“As the number of electronic, as well as traditional, methods of interacting with customers increase, it becomes increasingly difficult to coordinate interactions using these various methods.”). Further, “[m]any customers may prefer to receive fewer offers from a particular organization or over a particular channel, or to receive no offers at all.” Ex.1002 (1:31-33).

44. Prior art attempted to address those problems. As Bergh explains, “[f]or electronic channels, such as email, an organization may provide a mechanism to ‘unsubscribe’ from all future offers.” Ex.1002 (1:33-35). Also, “[t]he customer may . . . configure his or her client software to discard future offers, for example, by

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

discarding email from a particular address.” Ex.1002 (1:35-37). And “Web-based advertising on web sites [was] often targeted to particular classes of users, for example by keeping a record of individual user’s previous activities on those web sites.” Ex.1002 (1:37-40).

45. Finding prior art unsatisfactory, Bergh proposed “provid[ing] a mechanism for coordinating presentation of offers to customers that may originate from multiple sources and that may be delivered to the customers over different channels.” Ex.1002 (1:47-50). Bergh accomplished that by “us[ing] rules to prioritize, select, and time the delivery of offers to any particular customer, allocate limited resources in the channels to deliver offers to a set of customers, and provide mechanisms for users or their agents to limit the delivery of offers, for example, by their frequency or type.” Ex.1002 (1:50-55).

46. Bergh explains the invention as:

a computer controlled method for managing and distributing offers. The method includes preparing data characterizing a set of offers, each offer being associated with a targeted individual and one multiple channels

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

for presenting offers. These individuals can be, for example, actual or potential customers of products or services associated with the offers. A number of offers are selected for presenting to the individuals associated with those offers, including for at least some individuals, selecting from multiple offers associated with each of those individuals. The selected offers are presented to the associated individuals over the associated channels.

Ex.1002 (1:56-67).

47. Bergh further explains the invention's features as including one or more of:

Selecting from the offers includes prioritizing offers for particular individuals, and selecting offers according to their priorities.

Selecting from the offers includes allocating capacity of the channels to the selected offers, thereby not exceeding a capacity associated with each of the channels.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Presenting the selected offers includes accepting information from individuals and limiting presentation of the offers to said individuals according to said accepted information. The accepted information can characterize acceptable timing of presentation of offers to the individuals, and limiting presentation of offers then includes scheduling presentation of offers to the individuals according to the acceptable timing. For example, acceptable timing can relate to a frequency control by which an acceptable frequency of offers is specified by the individual. Other types of timing can relate, for example, to acceptable periods of the day during which presenting offers is acceptable to the individual.

Ex.1002 (2:3-20).

48. Bergh further explains “[t]he data characterizing the offers” as including “one or more of: data characterizing conditions under which said offers are to be presented, data characterizing the target groups associated with said offers,

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

and data characterizing information to be presented with the offers.” Ex.1002 (2:22-25).

49. Bergh further explains that its “method further includes tracking activities of the individuals to whom the offers were presented. Statistics related to an effectiveness of the offers can be reported. A sequence of related offers can be presented to those individuals based on their tracked activities.” Ex.1002 (2:26-30).

50. Bergh further explains that “[p]reparing the data characterizing the offers includes, for at least some of the offers, a first user preparing data characterizing a class of offers, passing the data characterizing the class of offers to a second user, and the second user preparing additional data characterizing the offer.” Ex.1002 (2:31-35).

51. Bergh further explains that “[t]he method further includes storing the prepared offers in a shared storage. The step of selecting from the offers is performed in a distributed manner in which separate computers access the shared storage.” Ex.1002 (2:36-39).

52. Bergh also explains that:

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

[i]n another aspect, in general, the invention is an offer management system. The system includes an offer design component for preparing data characterizing a set of offers. Each offer is associated with a corresponding target group of individuals. The system also includes a delivery component for selecting and presenting the offers to the individuals in the corresponding target groups, including a broker for prioritizing offers to particular individuals, for allocating capacity on a plurality of channels for presenting the offers, and for limiting presentation of the offers to individuals in the corresponding targets groups.

Ex.1002 (2:40-50). Further, “[o]ther features and advantages of the invention are apparent from [Bergh’s] description, and from the claims.” Ex.1002 (2:51-52).

B. Calloway (Ex.1003)

53. Calloway is U.S. Patent No. 7,865,394 B1. It is entitled “Multimedia Messaging Method and System.” Calloway’s nonprovisional application was filed on November 7, 2000. Calloway claims priority to U.S. Provisional Application No.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

60/197,759, which was filed on April 17, 2000. Ex.1002 at Cover. I therefore assume Calloway's priority date is April 17, 2000, which is earlier than the '555 patent's.

54. Calloway claims “[a] system and method for the distribution of individualized multimedia content over a network to a number of recipients.” Ex.1003 at Abstract; *see also* Ex.1003 (1:36-39) (“The present invention pertains to the individualization of multimedia content and more particularly to the automated creation and distribution of individualized multimedia messages and content over a network.”).

55. Calloway explains that “[t]he efficiency with which business and personal communications may be exchanged over computer networks is redefining traditional communication practices.” Ex.1003 (1:41-43). “Networks, such as the world wide web (internet),” Calloway explains, “are being used increasingly for both communication and advertising.” Ex.1003 (1:43-45). Further, “numerous other networks are becoming increasingly used for digital data delivery, such as satellite networks, interactive TV, cable networks, and wireless device networks.” Ex.1003 (1:45-48). “Traditionally,” says Calloway, “the delivery of communications and

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

advertising over networks has been accomplished through web sites and by the delivery of emails.” Ex.1003 (1:49-51). But that “has had numerous drawbacks.” Ex.1003 (1:53).

56. For example, Calloway identifies that “[a]dvertising on web sites requires that prospective clients be ‘driven’ to the site by traditional advertising, such as direct mail.” Ex.1003 (1:53-55). “[T]he use of email for advertising,” though, “has had some success.” Ex.1003 (1:56).

57. According to Calloway, “[t]ypical email campaigns generate a series of emails containing text or fixed multimedia elements which together constitute an offer.” Ex.1003 (1:57-59). But while “[t]he ability to merge text fields from a list has long been utilized for sending business correspondence and offers,” Calloway explains that “only a minor amount of user involvement and relevance is provided by text fields.” Ex.1003 (1:59-62). Indeed, “it has become increasingly difficult to get and hold the attention of a recipient with a text-only message.” Ex.1003 (1:62-64).

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

58. To that end, Calloway discloses that “[t]he drawbacks of using text-only advertising have long been recognized, and as a result conventional advertising, such as direct mail, now generously utilizes graphical elements for grabbing the recipient’s attention.” Ex.1003 (1:64-2:1). Thus “[o]ffers have been augmented by the addition of fixed multimedia elements which include graphics, animations, and/or audio, to engender recipient interest and action.” Ex.1003 (2:1-3). Despite those “attempt[s] to increase user involvement,” though, “the resultant messages are often still unable to attract and maintain user attention.” Ex.1003 (2:5-7).

59. For those reasons, according to Calloway, “[t]ext-based email marketing, therefore, is losing effectiveness as a medium for attracting and retaining the attention of a customer who in today’s market is being bombarded with numerous unengaging offers.” Ex.1003 (2:8-11). Thus, says Calloway, “a need exists for methods of increasing user involvement with content which is distributed over a network.” Ex.1003 (2:17-18).

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

60. Calloway explains that its “invention satisfies that need, as well as others, and overcomes the deficiencies of previously developed solutions.” Ex.1003 (2:17-21). As Calloway discloses, it:

provides methods for creating and distributing individualized multimedia content over a network. The multimedia messaging system provides a marketing tool for creating and deploying deeply relevant messages for boosting response, click-through and conversion levels, so that marketers may realize increased ad returns.

Ex.1003 (2:25-30).

61. Calloway further explains that:

By “individualizing” content, a sender is able to integrate specific information associated with a particular recipient into a multimedia message for that recipient. An example of multimedia, for example, could constitute the use of animations and voiceovers. The term “individualizing” is used within the present invention instead of “personalization” which often refers to fixed messages being sent to

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

subgroups of recipients, such as the elderly as a subgroup within a list of sports enthusiasts. The multimedia messaging system and method of the present invention, may hereafter be referred to for the sake of simplicity as “system”. The system marries the specificity of customer database information—such as name, hometown, or purchase history—with the power of streaming rich media to deliver a relevant and engaging message uniquely targeted to each specific recipient. The multimedia content directed to the recipient may include various forms of streaming rich media, including: animation, voice narration, graphics, pictures, video, music, sound effects, and ecommerce/interactive mechanisms. The use of individualized multimedia content increases recipient involvement beyond that achieved using “canned” (fixed) multimedia content.

Ex.1003 (2:31-51).

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

62. Calloway further explains that:

The system integrates recipient-specific customer database information into streaming and non-streaming audio and video creative content. It will be appreciated that although streaming media is preferred, the system can utilized [*sic*] with non-streaming media. The customer specific information used to drive the customization may be extracted from client databases, or alternately from third party databases. One aspect of the invention involves the deployment of individualized multimedia content as messages within an advertising campaign that targets and delivers an individualized email message to each recipient. For example, an individualized email may be created that utilizes individualized text and audio; text, audio, and graphics; or text, audio, graphics, and ecommerce/interactive mechanisms. In addition, the content may be deployed to various network-centric media Such as wireless WAP enabled devices, interactive TV, and even to printed media. The aforementioned examples being but a few of the numerous

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

combinations which may be realized for digital content distribution over a network. The terms “campaign”, or “advertising campaign” in reference to the system is often used herein for making reference to the action of sending individualized messages, however, the term can refer to the use of the system for sending any form of individualized messages to a single person, or any sized list of individuals. Examples of system use for individuals or small lists include applications such as newsletters, customer service responses, order confirmations, invoices, and so forth.

Ex.1003 (2:52-3:11).

63. Calloway further explains that:

In creating individualized audio, graphic, or animation content; the system combines media elements to create each of the individualized versions of a message. Typically, the message being delivered comprises both fixed content and individualized content, however, the message may be wholly comprised of individualized content. During

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

the campaign, the fixed content “message” to be delivered is customized with data about each of the intended recipients, thus creating individualized multimedia content which is delivered to each specific recipient. While the ad campaign runs, the message sponsors are preferably afforded the ability to measure results in real time. The multimedia messaging system may be utilized to provide solutions for deploying various individualized content, including: dynamic newsletters, printed material, direct sales catalogs, customer service responses, direct sales commercials, and various additional forms of promotional media.

Ex.1003 (3:12-28).

64. Calloway further explains that:

The system may be deployed in various configurations depending on the business model which is adopted. In a preferred “client access” model, the company operating the multimedia messaging system, hereinafter referred to as “the company”, provides the “client” with

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

access to the system for the development of a multimedia campaign.

An example of the client access model is shown in FIG.1. It will be appreciated that the client within the “client access” model may be provided with ancillary applications, such as a custom browser, to facilitate access and/or provide additional features and functions.

Ex.1003 (3:29-39).

65. Calloway further explains that:

In another preferred deployment of the multimedia messaging system, the client is provided with software, or software bundled with specific hardware elements, that may be installed at their own site from which to develop and deploy campaigns. This “client deployed” model is illustrated in FIG. 2 and it allows the client/advertiser to develop and deploy campaigns using their own equipment, or that of third parties if desired.

Ex.1003 (3:40-47).

66. Calloway further explains that:

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

The preferred method of deploying the individualized messages utilizes a standard email template containing a rich media message and a Macromedia flash file which is unique for that particular recipient. The unique message begins streaming and playing automatically when the message is highlighted in the recipient's email inbox. Alternatively, other methods may be utilized for deploying the individualized messages. The system adapts the message format to the delivery mechanisms which are available to the recipient through their email service provider or server. Some email service providers do not support HTML, for recipients with this service, the message includes a static graphic and a clickable link. When the recipient clicks on the link, a browser opens and the message unique to that recipient plays. A third type of email service provider allows neither HTML or attached executables. For recipients with this service, a simple text message and a clickable link are provided. Regardless of the deployment method, an

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

individualized message is created for each recipient which may be sent
by either the client, the company, or a third party.

Ex.1003 (3:48-67).

67. Calloway further explains that:

The aforementioned email message distribution described the use of implicit executables and/or links which were generated for each individualized message and then embedded in the email message, however, the system also provides for generating the individualized messages directly, instead of links to individualized messages. It will be appreciated that embedded links could not be used when the system is generating printed material, and may be undesirable when distributing content to any non-interactive environment including MPEG files, and certain wireless media networks. By way of example FIG. 3 shows the generation of individualized messages within printed material, wherein individualized content, graphics in this case, are printed onto paper stock or other materials.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Ex.1003 (4:1-14).

68. Calloway further explains that:

The recipient data for individualizing, and optionally for directing message delivery in the case of emails, is preferably extracted from one or more client databases by any of numerous methods, including ODBC and XML. Alternatively, the recipient information may be manually received from the client, remotely accessed, or derived/inferred from known elements. For example, the client may send data over the internet, as a tape, a set of disks, or as a CD-ROM. The system preferably accepts a variety of file formats including the common: *.txt, *.csv, spreadsheets formats, and any relational or non-relational database format. The recipient data is then used to individualize the media elements, which may include audio, animations, and/or video for each recipient. During an individualized campaign, each recipient on the campaign list receives, preferably in a dynamic display format, one or more messages containing the multimedia message or a link to the

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

multimedia message. One typical form of messaging campaign involves the sending of emails to a list of recipients. The email messages are preferably configured as HTML messages, or a similar markup language, into which are attached the multimedia elements comprising the individualized messages. To support recipients unable to directly receive multimedia elements within their emails, a unique URL can be embedded within the email message to open a browser for displaying the individualized multimedia message. The unique URL is preferably activated immediately upon selecting the message, and alternatively upon opening or upon user selection of the graphic, or text, associated with the URL link. Upon link activation, a server is connected to the recipient through their browser to deliver the individualized audio-video stream to the recipient.

Ex.1003 (4:15-45).

69. Calloway further explains that:

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

The preferable display format within the exemplified embodiment utilizes Macromedia's Flash™ file format (*.swf), as it provides both dynamic capability and data queries. Macromedia Flash™ is one of a number of commercially available rich media open-source formats. The associated display routines for the display format receive the output from active server pages and an XML (or similar) application which permits interactivity with the server side components, such as content and information databases. The integration of the active server pages and the XML applications within the *.swf format permit the real-time creation of variable content which is selected in real time in response to dynamic criteria, either in the form of feedback from the recipient, or a priori, based on database content and/or server-side rules.

Ex.1003 (4:46-59).

70. Calloway further explains that:

The system is preferably deployed so that clients can easily manage their multimedia campaigns, maintain the content databases, and

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

receive real-time reports on the status of a campaign. The multimedia elements which are to be assembled for the individualized messages may be created by the client, or by a third party. The list of recipients to which the messages are to be directed is contained within a recipient database that may be supplied by the client, or a third party. The recipient database provides delivery information about the client, such as email address, along with various information about the recipient which may be utilized in the process of individualizing a message to that specific recipient. Considering a simple use of the inventive method; emails may be individualized with the recipient's name incorporated within a portion of the graphic, animation, and/or audio portion of the message. In order to generate these simple individualized emails, the system requires a set of multimedia elements from which messages are to be created, and a list containing at least the recipient's name and email address. It will be appreciated that in generating non-email individualized multimedia, an email address would not be

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

required, however, some form of recipient information is required upon which customization and delivery is to be based. In an email campaign, for instance, the audio portion of a message can be individualized to voice the recipient's name as part of the message by selecting audio segments which are preferably extracted from an audio content database. Alternatively, audio (or video) content may be directly generated in response to the message parameters, such as recipient's name, since various forms of speech synthesis are available which are capable of converting text to speech. Presently, the generation of the speech segments from text is complicated by voice quality concerns, lack of inflection control, and the problems associated with blending the segments into the fixed portion of the message. Similarly, video content may be generated in response to animation scripting, and sprites, such that animation content is generated according to a script which may be varied in real-time and does not require image frames or elements. However, the preferred method for creating an individualized

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

audio message within the present invention is by the assembly of fixed audio portions to create an individualized message. The elements may be added to the streaming media of the message based on predetermined triggers, such as database flags. In order to reduce the storage requirements, the individualized elements may be stored individually for reference to a unique URL embedded within the email which may also reference a common fixed message portion, wherein the individualized elements are combined with the fixed message portion when the unique link is activated.

Ex.1003 (4:60-5:41).

71. Calloway also explains that:

It will be appreciated that the method may be utilized with individualization performed at any desired level of complexity so as to engage the attention of the recipient to which the message is directed. The system and method can provide a number of product solutions which are outlined by way of example in the table shown in FIG. 5.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Ex.1003 (5:42-47).

72. Calloway further gives “examples of hypothetical advertising campaigns to further illustrate the capability of message individualization within the system.”

Displaying a graphic of a recipient’s recently purchased vehicle with the correct color and style, while tying in their name and purchasing inclinations into the accompanying audio message which includes graphics and descriptions of the available accessories that may be purchased.

Sending an automotive maintenance reminder which includes a photo of the recipient’s vehicle and recent service history where it has been determined that service is due, based on elapsed time and the previous odometer reading. Included can be a customized reservation response allowing the selection of available service dates.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Displaying graphics of suggested video titles that a customer may wish to rent based upon their video rental history.

Displaying an individualized jukebox animation that allows the playing of music track excerpts from newly released albums which have been selected according to the recipient's purchase history and stated preferences.

Displaying a set of graphical service instructions tailored to the particular customer and service request as received by a customer service department.

Displaying an animation of a character within the recipients age/demographic profile engaged in an action associated with their favorite sport, such as teeing off a golf ball, and accompanied with related sports product information.

Ex.1003 (5:47-6:12). Calloway further explains that its "illustrations are provided by way of example, and not of limitation, as the method and system of the present

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

invention is capable of being applied to a wide variety of current and future individualized messaging applications.” Ex.1003 (6:14-18).

73. Calloway goes on to list various objects of its invention. For example, Calloway states that:

An object of the invention is to automate the creation and delivery of individualized multimedia content to recipients.

Another object of the invention is to provide an individualized message delivery system capable of delivering common rich media types.

Another object of the invention is to provide an individualized message delivery system capable of being deployed over a variety of digital networks.

Another object of the invention is to provide a system which is capable of delivering individualized content without requiring that the recipient have a particular plug-in installed within their system.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Another object of the invention is to support “on-the-fly” content changes to the underlying databases.

Another object of the invention is to provide for synchronization of the multimedia elements within an individualized message.

Another object of the invention is to provide for efficient content management of the elements necessary for creating individualized messages.

Another object of the invention is to provide for data integration between the multimedia messaging system and a client system which contains the data for driving a particular campaign.

Another object of the invention is to provide deployment flexibility, wherein aspects of the multimedia messaging system may be utilized in combination with various other systems and routines to extend performance or application utilization.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Another object of the invention is to provide architectural scalability wherein individualized messaging may be utilized within businesses of various size.

Another embodiment of the invention is to provide for the delivery of individualized multimedia forms, correspondence, notifications, announcements, newsletters, and other forms of multimedia messages directed to small lists and individuals.

Another object of the invention is to provide delivery of individualized multimedia message content via email and other interactive media.

Another object of the invention is to provide delivery of individualized multimedia email messages that are played automatically upon message selection.

Another object of the invention is to provide delivery of individualized multimedia messages via print media and other non-interactive media.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Another object of the invention is to provide a mechanism for deploying word-of-mouth advertising with recipient supplied information.

Another object of the invention is to provide email messages which are user interactive so that the user can get additional recipient specific information and may place an order.

Another object of the invention is to provide an advertising mechanism in which the offer, discount, coupon, or rebate being presented may be adjusted “on-the-fly”.

Another object of the invention is to deliver the individualized content in a form that has been determined to be compatible with the browser of the recipient.

Another object of the invention is to provide real-time reporting of activity, such as click-through, and system state.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Another object of the invention is to provide a revenue collection model wherein the client may be incrementally charged only for the emails which have been opened by the recipients.

Another object of the invention is to provide a system for developing and deploying individualized multimedia content that supports various system usage levels; such that clients requiring limited usage may gain easy remote access to the system while clients that require extensive usage may install system software on their own systems.

Another object of the invention is to provide a system for developing and deploying individualized multimedia content in which a library of routines is available as part of the system to speed campaign development.

Ex.1003 (6:19-7:26). Calloway also explains that “[f]urther objects and advantages of the invention will be brought out in the following portions of the specification, wherein the detailed description is for the purpose of fully

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

disclosing preferred embodiments of the invention without placing limitations thereon.” Ex.1003 (7:27-31).

C. Lerner (Ex.1004)

74. Lerner is U.S. Patent No. 6,859,909 B1. It is entitled “System and Method for Annotating Web-Based Documents.” Lerner’s nonprovisional application was filed on March 7, 2000. Ex.1004. I therefore assume Lerner’s priority date is March 7, 2000, which is earlier than the ’555 patent’s.

75. Lerner is “related to a system and method of marking, organizing, and searching Web-based documents.” Ex.1004 (1:6-7). As Lerner explains, “[s]tandard desktop word processing applications enable computer users to create and edit text-based documents.” Ex.1004 (1:11-12). To that end, “software utilities exist that integrate electronic sticky notes and users’ on screen drawings directly into the document” so that users have “more flexibility in the editing and markup of these documents.” Ex.1004 (1:13-16). “This type of document annotation,” explains Lerner, “enables users to mark and view documents on screen as if the documents were in front of them on paper.” Ex.1004 (1:16-18).

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

76. Still, Lerner explains that prior art had its problems. “[T]he current annotation system requires users to annotate documents compatible with specific word processing applications that lack portability,” explains Lerner. Ex.1004 (1:19-21). Users acutely felt that problem if they “wanted to send another person an annotated document.” Ex.1004 (1:21-22). If they did, explains Lerner, then they “would have to e-mail the document as an attachment and hope the recipient has the same application software to view the document[.]” Ex.1004 (1:23-25).

77. Thus, explains Lerner, “there is a need in the art for a simple method and system of annotating and collecting Web-based documents.” Ex.1004 (1:26-28). That required “the integration of any type of annotation, including text, ink, highlighter and audio, directly into Web-based documents, such that any person with a Web browser may view the annotations, with or without the software used to create the annotations.” Ex.1004 (1:28-32). And “[t]here is also a need for a method and system of annotating and collecting blank Web-based documents, effectively converting a Web browser into an online notebook/scrapbook.” Ex.1004 (1:32-35).

78. To that end, Lerner explains its invention as:

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

relat[ing] to the integration of any annotation, including ink, highlighter, text-based notes and audio, directly into a Web-based document (WBD) displayed by a Web browser. This integration enables others to view the personalized annotated WBD, which retains its original active links and properties, over the Internet without the need for specialized software. Annotations are integrated into WBDs by freezing the WBD, overlaying an image file containing the annotations onto the WBD, and enabling browser events to pass through the image layer. Annotations may also be integrated into WBDs by using component object technology. The present invention collects and organizes annotated WBDs, and provides users with an intuitive Web-based interface for accessing, viewing and searching the annotated WBDs. Users may annotate blank WBDs, effectively converting their Web browsers into online notebooks/scrapbooks. The present invention also provides users with many novel interface techniques, such as dogears and its associated navigation tools, splitting

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

pages, turning pages, selecting and copying various portions of a WBD
(including shaking out a copy), and marking menus suited for right-
handed or left-handed users.

Ex.1004 (1:39-60).

79. To enable that functionality, Lerner discloses “a data structure of an annotation record that is used to store information in annotation database 280 in accordance with an exemplary embodiment of the present invention.” Ex.1004 (4:64-67). “Each annotation record,” discloses Lerner, “contains all pertinent information relating to the appearance and make-up of a single annotated WBD associated with annotation repository 240.” Ex.1004 (4:67-5:3). And that “annotation record 500 includes . . . a URL content hash 520 field.” Ex.1004 (5:3-5).

80. Lerner explains that its URL content hash field “contains an integer value that results from the execution of a standard hash function on the contents of the WBD.” Ex.1004 (5:13-16). The “[a]nnotation repository 240,” explains Lerner, “uses this value to generate an Internet address for the annotated WBD that can be

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

mapped to the annotated WBD's location in annotation database 280." Ex.1004 (5:15-18).

D. Nagda (Ex.1005)

81. Nagda is U.S. Patent No. 7,302,430 B1. It is entitled "Workflow Management System for Generating Output Material Based on Customer Input." Nagda's nonprovisional application was filed on August 31, 1999. I therefore assume Nagda's priority date is August 31, 1999, which is earlier than the '555 patent's.

82. Nagda's "invention relates to method, system, and program [*sic*] for automated creation and delivery of customer output and, in particular, output material based on customer input." Ex.1005 (1:8-11). Prior art "[d]irect mail printers and printer software," explains Nagda, "allow a user to generate and print marketing materials tailored for different customers." Ex.1005 (1:13-15). Indeed, "[m]any systems have a database of customer information and merge the customer information from the database into customer marketing material forms that are then mailed or otherwise distributed to the customer." Ex.1005 (1:15-18). To do that,

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

explains Nagda, “[t]ypically[] the marketing material forms have variable fields into which the customer information is inserted from the database during the process of merging the forms with the database data.” Ex.1005 (1:18-22).

83. Even so, explains Nagda, “[t]he effectiveness of a direct mail marketing campaign can be significantly improved by customizing the content of marketing materials to each customer’s needs and situation.” Ex.1005 (1:23-25). “Existing and potential customers will more likely pay attention to marketing materials that appear to directly address issues that are pertinent to the customer,” explains Nagda. Ex.1005 (1:26-28). “Likewise,” says Nagda, “customers will tend to ignore marketing materials that include information that is irrelevant to their needs and preferences.” Ex.1005 (1:28-31). And so, “computerized direct mail marketing methods continually seek to provide ways to further customize direct mail marketing materials to the specific needs and desires of customers.” Ex.1005 (1:31-34).

84. Still, explains Nagda, “[o]ne current problem with customized mail marketing is that substantial human intervention is needed to gather the customer information and prepare the generated customized marketing material for

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

distribution.” Ex.1005 (1:35-38). Nagda explains that “[a]fter the files are generated they are typically printed, then placed in an envelope,” after which “[t]here can often be a considerable lag time between the time customer information is gathered and the customized materials are generated, then mailed to the customer.” Ex.1005 (1:40-42).

85. In contrast, explains Nagda, “[d]elivery of non-customized marketing material can occur instantly, and is sometimes transmitted via facsimile or electronic mail.” Ex.1005 (1:43-45). But the problems Nagda identified with prior art make “non-customized marketing material . . . not as effective a marketing tool as customized information.” Ex.1005 (1:45-47). “Accordingly,” identified Nagda, “there is a need in the art for an improved system, method, and program for generating and delivering tailored marketing materials to existing and potential customers.” Ex.1005 (1:48-51).

86. To fill that need in the art, Nagda discloses:
a system, method, and program for a automated creation and delivery
system [*sic*] for generating customer output information. A customer

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

record in a first database table is interactively generated to include fields specifying at least one product, product demands, product preferences, and a selected output method to deliver output material on the product specified in the customer record. At least one customer record in the first database is received and at least one content file is accessed by processing a second database table using values in one received customer record. The content of each accessed file is then generated into the output material. A selected one of a plurality of delivery options is determined from the customer record and the output material is transmitted via the determined delivery option to the customer specified in the customer record.

Ex.1005 (1:57-2:5).

87. Nagda further discloses that “[i]n further embodiments, the customer records in the first database are generated by a human operator interacting with a customer to determine customer demands and preferences.” Ex.1005 (2:6-8).

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

88. Nagda further discloses that “[i]n still further embodiments the delivery options include electronic mail, facsimile, and postal mail. In such case, the output material is automatically transformed to a format compatible with the selected delivery option, wherein a different format is used for each delivery option, wherein the transformed output is transmitted to the customer via the selected delivery option.” Ex.1005 (2:9-15).

89. Nagda further discloses that:

Preferred embodiments provide a automated creation and delivery system to generate customer records in a database that are used to determine the output to generate onto a template, which when generated includes the tailored marketing information to send to the customer. After generating the output materials, the output materials are then transferred to an output device to deliver to the customer according to a customer specified delivery method. Thus, the preferred automated creation and delivery system comprises obtaining client information concerning products, preferences and demands through an operator

questioning the client and using this customer data to generate output materials tailored to the customer's needs, which may then be automatically transferred via different possible transmission routes to the customer that were requested by the customer.

Ex.1005 (2:16-30).

VI. APPLICATION OF PRIOR ART TO CHALLENGED CLAIMS

90. In applying the aforementioned prior art to the challenged claims, I use **bold font** to indicate terms related to the '555 patent's claim terms.

A. Ground 1: Claims 1-6 and 9-15 are obvious over Bergh in view of Nagda

91. I have considered Bergh and Nagda. As my analysis below indicates, those references and a POSITA's general knowledge disclose or suggest every limitation of claims 1-6 and 9-15.

92. Because these limitations were all disclosed or suggested, it would have been trivial for a POSITA to combine prior art and general knowledge to arrive at the claimed invention. In other words, a POSITA using standard techniques would have had a reasonable expectation of success in making those combinations.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

93. A POSITA would have also been motivated to make those combinations. The '555 patent seeks to make email campaigns more “effective,” as well as improve the “efficien[cy]” of how they are “creat[ed] and track[ed].” Ex.1001 (1:33, 1:43-44). Bergh is no different. Its specification explains that prior art email campaigns had been degraded in their “effectiveness” of “communication[s] with [a] customer.” Ex.1002 (1:29-30). Nagda is similar. Its specification laments that prior art campaigns require “substantial human intervention” to overcome the ineffectiveness of uncustomized campaigns. Ex.1005 (1:35-47). In sum, the '555 patent, Bergh, and Nagda all share an identical or, at the very least, similar goal.

94. For at least those reasons, it is my opinion, then, that a POSITA would have been motivated to combine Bergh, Nagda, and general knowledge to arrive at claims 1-6 and 9-15.

95. For at least all those reasons, it is my opinion that claims 1-6 and 9-15 are obvious over Bergh in view of Nagda and a POSITA's general knowledge.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

1. Claim 1

**a. [1a] “A method for conducting an email campaign,
comprising the steps of:”**

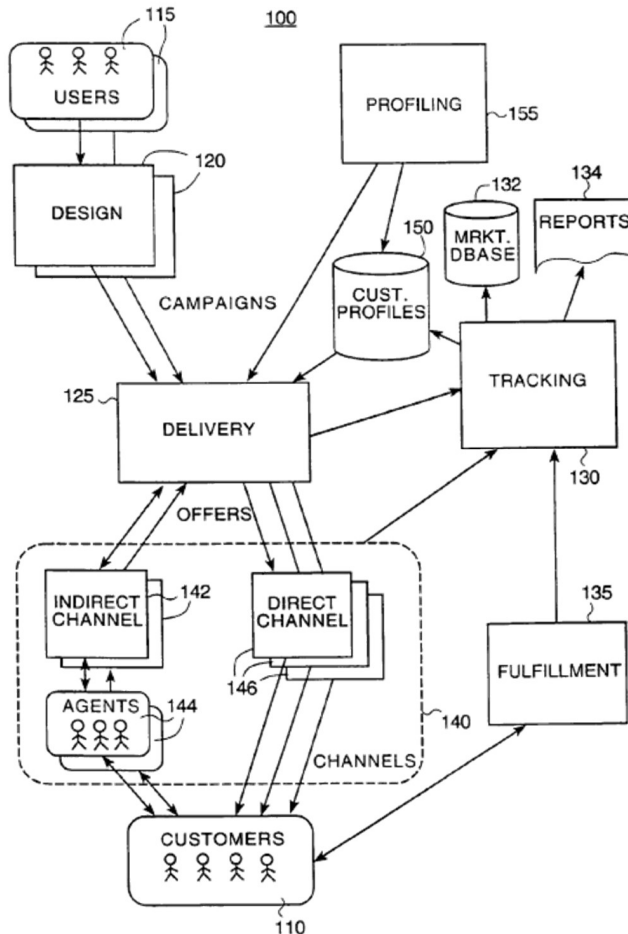
96. Claim 1a is not limiting. It is mere preamble, explaining that its **method for conducting an email campaign is comprised** of various steps—*i.e.*, claims 1a-1g. Even so, Bergh discloses or suggests claim 1a to the extent it may be construed as limiting.

97. Bergh discloses an offer management system, which Figure 1 illustrates. Bergh explains that offers “are delivered by [the] offer management system 100 to customers” and that those offers “include commercial offers.” Ex.1002 (Sheet 1); Ex.1002 (3:9-11, 3:16-17).

98. Bergh discloses or suggests using its offer management system to **conduct an email campaign**. Bergh’s specification explains that “a

‘**campaign**’ refers a collection of offers.” Ex.1002 (3:32-33). And a collection of offers may be delivered via “**email**.” Ex.1002 (3:37-46); *see also* Ex.1002 (4:29-31)

FIG. 1

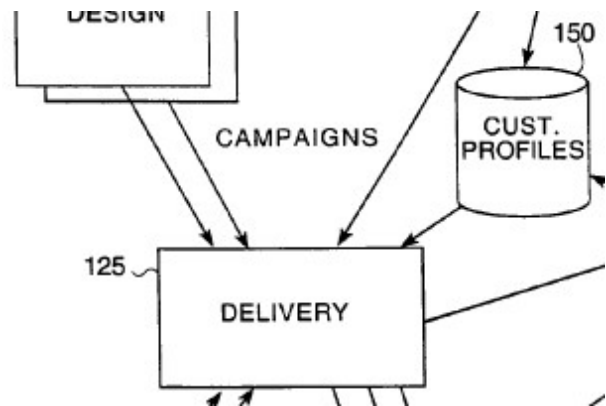


("[The] delivery component 125 can send an electronic mail message to one or more customers 110 that includes an offer.").

99. For at least those reasons, it is my opinion that Bergh discloses or suggests claim 1a if claim 1a is limiting.

b. [1b] "(1) receiving an email target database;"

100. Starting with **an email target database**, Bergh discloses that "customers" are the "individuals or entities that are desired **targets** for the offers." Ex.1002 (3:17-18). And the "specific" information going "to [each] customer[]" may be stored in a "customer profile **database**." Ex.1002 (5:29-31). Bergh's customer profile database is illustrated at 150 in this excerpt from Figure 1. Bergh, therefore, discloses or suggests **an email target database**.



101. Bergh likewise discloses or suggests claim 1b's **receiving** limitation. Bergh's specification explains that the "delivery component" uses the "customer

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

profile database.” Ex.1002 (5:44-45). Figure 1 also shows an arrow going from customer profile database 150 to delivery component 125. A POSITA would understand both from the specification’s disclosure of the delivery component’s use of the customer profile database, as well as Figure 1’s arrow going from the customer profile database to the delivery component, that the customer profile database is **received**.

102. Moreover, **receiving** a database from an external source would have been well-known to a POSITA. *See* Ex.1005 (1:15-18) (“Many systems have a database of customer information and merge the customer information from the database into customer marketing material forms that are then mailed or otherwise distributed to the customer.”).

103. For at least those reasons, it is my opinion that Bergh and a POSITA’s general knowledge disclose or suggest claim 1b.

- c. [1c] “(2) **generating an email campaign template related to at least one email target in the received email target database, wherein step (2) comprises:**”

104. Claim 1c is not limiting. It merely discloses **generating an email campaign template related to at least one email target in the received email target database** in a way that is **comprised** of various steps—*i.e.*, claims 1d and 1e. Even so, Bergh discloses or suggests claim 1c to the extent it may be limiting.

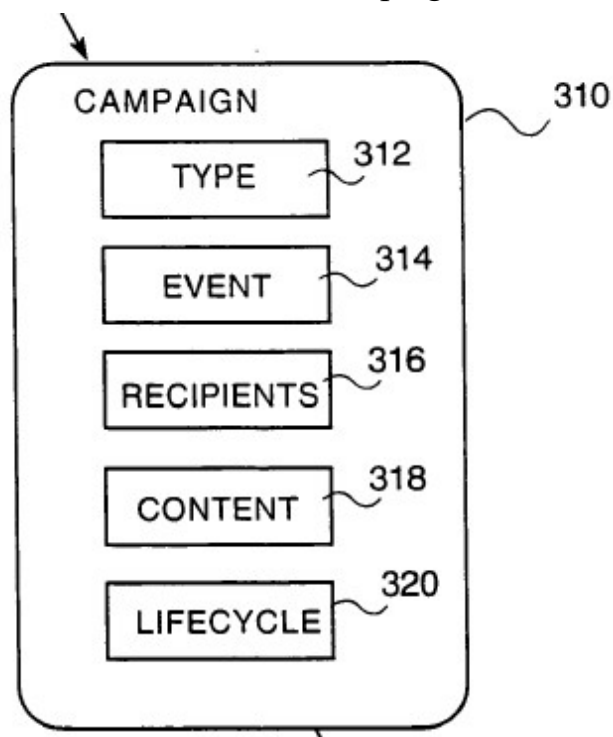
105. Claim 1c requires a **received email target database**. A POSITA would see no difference between that and claim 1b’s **receiving an email target database**, which I discussed above as being disclosed or suggested by Bergh and a POSITA’s general knowledge.

106. The only remaining elements of claim 1c are **generating an email campaign template related to at least one email target**. But as I discuss below, that limitation is merely **comprised** of claims 1d and 1e, which are themselves disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

107. For at least those reasons, it is my opinion that claim 1c is disclosed or suggested by Bergh, Nagda, and a POSITA's general knowledge, assuming claim 1c is limiting at all.

d. [1d] “(a) generating a message template, and”

108. Bergh's Figure 3 illustrates the structure of its campaigns. Ex.1002 (Sheet 3). Bergh explains that a “campaign can be thought of as a **template** for offers that are instantiated for particular customers.” Ex.1002 (8:8-10); *see also* Ex.1002 (3:32-35) (explaining that campaigns include “a **template** or rule” to “determine[]” the “one or more offers to specific customers”). Included in a campaign **template**, explains Bergh, is “content,” which is shown in the Figure 3 excerpt at 318.



Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

109. Content is what Bergh discloses as “specif[ying] the content and layout of the information of an offer.” Ex.1002 (8:21-22). A POSITA would understand that specifying content and layout information of an offer requires **generating** those specifications. As for content itself, it can include many things. For example, content may include “text” and “HTML,” as well as customer-specific data, like “the customer’s name,” which may be “filled in” to “personalize[.]” an email before it is delivered. Ex.1002 (8:23-26); *see also* Ex.1002 (8:27-28) (noting that “email **message[s]**” include content).

110. For at least those reasons, it is my opinion claim 1d is disclosed or suggested by Bergh and a POSITA’s general knowledge.

- e. **[1e] “(b) generating a configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template;”**

111. Nagda discloses that a “customer record” includes information like the “Customer[’s] Name” and “E-Mail Address.” Ex.1005 Fig.2a; *see also* Ex.1005 (4:17-18) (“FIGS 2a and 2b provide an example of a customer record database entry form[.]”). A POSITA would have generally known to **generate** Nagda’s customer

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

record. *See* Ex.1005 (11:45) (disclosing “**generating** a customer record in a first database table”); *see also* Ex.1005 (11:33-34) (“Many modifications and variations are possible[.]”). Nagda also discloses “using the preferences and information in the customer record to query and select a file that includes content tailored to the customer[’s] express preferences.” Ex.1005 (5:31-33). A POSITA would have generally known **generating** a file includes querying and selecting it. Based at least on those disclosures, it is my opinion that Nagda and a POSITA’s general knowledge disclose or suggest **generating a configuration file to contain data related to each of the at least one email target**.

112. Nagda also discloses “**template[s]**,” which “include[] the tailored marketing information to send to the customer.” Ex.1005 (2:19-20). To “populate[] the **template** with marketing information tailored for the customer,” Nagda discloses an “output constructor,” which “us[es] information in the customer record from the customer database” to perform said population of the template. Ex.1005 (3:12-15). Similarly, Nagda also discloses populating “container[s]” or “sections” in a **template** with “files from the content database.” Ex.1005 (4:41-42, 5:39-40). Based

on those disclosures, it is my opinion that Nagda also discloses or suggests **wherein the data is insertable in the generated message template.**

113. For at least those reasons, it is my opinion that claim 1e is disclosed or suggested by Nagda and a POSITA's general knowledge.

f. [1f] **“(3) sending to each of the at least one email target a corresponding custom email, wherein the custom email is formed from the email campaign template; and”**

114. Bergh discloses both that its “**email** message may be **sent** directly to customers,” and that those email messages may be “personalized.” Ex.1002 (8:24-28). And, as discussed above, Bergh and Nagda disclose or suggest claim 1c's **generating an email campaign template.** A POSITA would understand that sending **email** messages directly to customers discloses or suggests **sending to each of the at least one email target a corresponding email.** A POSITA would likewise understand that personalizing email messages discloses or suggests that the sent **emails** are **custom emails** that are **formed from the email campaign template.**

115. For at least those reasons, it is my opinion that claim 1f is disclosed or suggested by Bergh, Nagda, and a POSITA's general knowledge.

g. [1g] “(4) tracking the custom email sent to each of the at least one email target.”

116. “[T]**racking** activities of the individuals to whom . . . offers [are] presented” is disclosed by Bergh, to include **tracking** the “effectiveness of the offers” or “marketing campaigns” using “[s]tatistics.” Ex.1002 (2:26-30, 12:34); Ex.1002 (14:39-42). That **tracking** can include:

- “recording a customer’s access to a Web server,”
- “receiv[ing] a notification that the customer has read [an] email,”
- “solicit[ing] an email response” from the customer,”
- **tracking** “customers access[] [to] particular web content,” and
- **tracking** “particular activity related to offers,” like “requests for information, performing commercial transactions, or otherwise explicitly responding to offers.” Ex.1002 (4:47-53, 12:36-41).

117. For at least those reasons, it is my opinion that claim 1g is disclosed or suggested by Bergh.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

2. **Claim 2: “The method of claim 1, wherein step (1) comprises the step of: (a) generating the email target database.”**

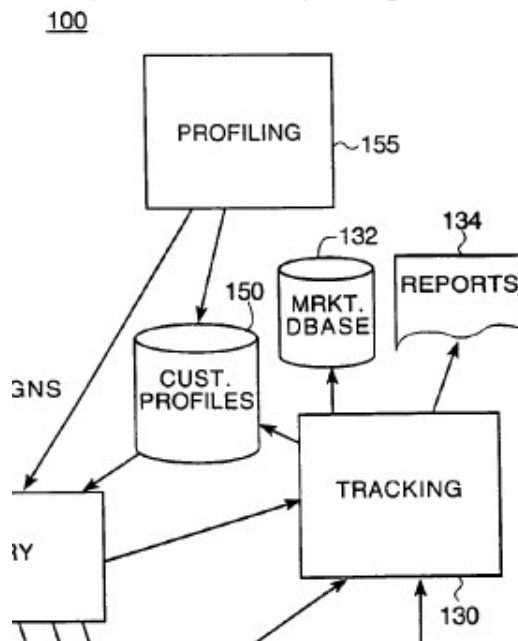
118. It is my opinion that claim 2 is substantially similar to claim 1b. Both claims recite as follows:

Claim 1b	Claim 2
(1) receiving an email target database;	The method of claim 1, wherein step (1) comprises the step of: (a) generating the email target database.

As this comparison demonstrates, both claims require an **email target database**.

Claim 1b requires **receiving** it. But claim 2 requires **generating** it.

119. Bergh's Figure 1 shows arrows pointing from tracking component 130 and profiling component 155 to customer profiles **database** 150. Ex.1002 (Sheet 1). A POSITA would understand these arrows to indicate the profiling component and/or tracking component are used to **generate** the customer profiles **database**. The specification adds further support, explaining that the tracking component and profiling component both "provide[] data" to the customer profiles **database**. Ex.1002 (5:29-30, 5:43-44). A POSITA would understand that providing data to a **database** is to **generate** the **database**.



120. Similar to Bergh, Nagda discloses that customer records include "information for the delivery method, e.g., e-mail address." Ex.1005 (4:40-43). Nagda further discloses that those customer records are included in a "**database**" that is "**generated** by a human operator" and/or "[an] automated creation and

delivery system.” Ex.1005 (2:6-17). A POSITA would understand those disclosures as disclosing or suggesting **generating the email target database**.

121. For at least those reasons, it is my opinion that claim 2 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

3. Claim 3

a. [3a] **“The method of claim 2, wherein step (a) comprises the steps of: (i) collecting at least one raw document;”**

122. Bergh discloses **collecting** “survey forms filled out by customers when registering a product” as an example of the “customer-provided information” that it “assemble[s] . . . about particular customers.” Ex.1002 (5:37-38, 5:41-43). A POSITA would understand that survey forms are **raw documents**. *See, e.g.*, Ex.1001 (8:40-47) (identifying “resume data gathered by a spider engine” as “raw”).

123. For at least those reasons, it is my opinion that claim 3a is disclosed or suggested by Bergh and a POSITA’s general knowledge.

b. [3b] “(ii) parsing said collected at least one document;”

124. A POSITA would have understood that claim 3a’s **at least one raw document** must be **parsed** for its information to be accessible by a computer. For at least that reason, it is my opinion that claim 3b is disclosed or suggested by Bergh and a POSITA’s general knowledge.

c. [3c] “(iii) categorizing said parsed at least one document into at least one category;”

125. Bergh discloses that the customers within its “customer profile database” are assigned a “class[.]” Ex.1002 (5:29-31). A “class” includes things like “a market segment,” which can be used for refining who offers are targeted to. Ex.1002 (7:1-3); *see also* Ex.1002 (11:54-56) (“[P]rioritization rules may relate to the class of user 115 that originated the offer, for example, preferring offers from a corporate marketing department to those of a local distributor.”). A POSITA would understand assigning classes to customers as **categorizing** them. Further, and as discussed, claim 2 recites a method for **generating the email target database**. Claim 3 depends on claim 2, reciting claim 2’s method but using **raw documents** to

generate the email target database. Given that context, a POSITA would understand that assigning a class to customers within a customer profile database when using **raw documents** requires **categorizing the parsed at least one document** containing each customer's information.

126. For at least those reasons, it is my opinion that claim 3c is disclosed or suggested by Bergh and a POSITA's general knowledge.

d. [3d] “(iv) inserting said at least one document into a database; and”

127. Bergh discloses “providing data to [a] customer profile **database**,” Ex.1002 (5:44), which a POSITA would understand as including **inserting said at least one document into a database**. Indeed, a POSITA would have generally known that **documents** must be **inserted into a database** for them to later be retrievable. And so even if Bergh did not disclose or suggest claim 3d, a POSITA would have been motivated to modify Bergh to include it so that **parsed documents** could later be accessed through the customer profile database.

128. For at least those reasons, it is my opinion that claim 3d is disclosed or suggested by Bergh and a POSITA's general knowledge.

**e. [3e] “(v) removing documents from the database
corresponding to duplicate email addresses.”**

129. Bergh discloses that its “delivery component” uses “a database query of [the] customer profile database” to decide “[t]he specific customers to whom the offer is sent.” Ex.1002 (8:10-12). Further, explains Bergh, a customer should not “receiv[e] **duplicate . . . offers.**” Ex.1002 (6:51-52). A POSITA would understand from these disclosures that the customer profile database must have **duplicate email addresses removed** to prevent the delivery component from sending **duplicate** offers.

130. For at least those reasons, it is my opinion that claim 3e is disclosed or suggested by Bergh and a POSITA’s general knowledge.

4. **Claim 4: “The method of claim 1, wherein step (1) comprises the step of: (a) requesting an email target database according to a structured query language statement.”**

131. It is my opinion that claim 4 is substantially similar to claim 1b. Both claims recite as follows:

Claim 1b	Claim 4
(1) receiving an email target database;	The method of claim 1, wherein step (1) comprises the step of: (a) requesting an email target database according to a structured query language statement.

As this comparison demonstrates, both claims require an **email target database**. Claim 1b requires **receiving** it. But claim 4 requires **requesting** it **according to a structured query language statement**.

132. To that end, Bergh discloses that the “**database** server” it uses to store “pending offers” and “customer profiles” includes “a **SQL** server.” Ex.1002 (6:38-40). A POSITA would understand **SQL** as referring to **structured query language**, meaning that an **SQL** server processes **requests according to structured query language statements**. A POSITA would likewise understand that because Bergh’s

SQL server includes both at least pending offers and customer profiles, a **structures query language statement** is required to **request** the customer profile **database** specifically, as opposed to requesting all the information generally stored on the SQL server.

133. For at least those reasons, it is my opinion that claim 4 is disclosed or suggested by Bergh and a POSITA's general knowledge.

5. **Claim 5: "The method of claim 1, wherein step (1) comprises the step of: (a) receiving an email target database from a database vendor."**

134. It is my opinion that claim 5 is substantially similar to claim 1b. Both claims recite as follows:

Claim 1b	Claim 5
(1) receiving an email target database;	The method of claim 1, wherein step (1) comprises the step of: (a) receiving an email target database from a database vendor.

As this comparison demonstrates, both claims require an **email target database**. Claim 1b requires **receiving** it. And so does claim 5, though claim 5 adds that the **email target database** must be **received from a database vendor**.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

135. Bergh discloses that third-party “sales-force automation (SFA) systems and lead management systems” may be integrated as part of Bergh’s use of “indirect channels.” Ex.1002 (4:14-16). A POSITA would understand that integrating third-party SFA and lead management systems generally includes **receiving an email target database from a database vendor**. Indeed, it was well-known by POSITA’s that the “leads” within “a lead management system” could originate from many “[l]ead sources,” including “purchased mailing lists.” Ex.1010 (14-20). A POSITA would likewise understand that integrating purchased mailing lists specifically includes **receiving an email target database from a database vendor**.

136. For at least those reasons, it is my opinion that claim 5 is disclosed or suggested by Bergh and a POSITA’s general knowledge.

6. Claim 6

- a. **[6a] “The method of claim 1, wherein step (b) comprises the steps of: (i) generating a custom uniform resource locator address for each of the at least one email target; and”**

137. “[E]mail message[s]” sent by Bergh’s offer management system may “include[] a link to content stored in a web offer database specifically for that

customer.” Ex.1002 (10:63-66). A POSITA would understand that including a link within an email message requires **generating** it. A POSITA would further understand that including links within email messages that are specific to a customer includes **custom uniform resource locator addresses for each of the at least one email target**.

138. For at least those reasons, it is my opinion that claim 6a is disclosed or suggested by Bergh and a POSITA’s general knowledge.

b. [6b] “inserting the generated custom uniform resource locator address for each of the at least one email target into the configuration file.”

139. Claim 6 depends on claim 1, and claim 1e requires **generating a configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template**. Given that context and because Bergh’s “HTML links” are eventually placed into “the email message,” Ex.1002 (8:28-29), and because Nagda discloses or suggests that the customer information used to customize those email messages is stored in

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

configuration files, as I discussed above, a POSITA would understand that Bergh’s HTML links should be **inserted** into Nagda’s **configuration files**.

140. For at least those reasons, it is my opinion that claim 6b is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

7. **Claim 9: “The method of claim 1, wherein step (3) comprises the step of: (a) forming the custom email for each of the at least one email target from the generated text message template and the generated configuration file.”**

141. It is my opinion that claim 9 is simply a variation to how the **custom email** is **formed** in claim 1f. Both claims recite as follows:

Claim 1f	Claim 9
(3) sending to each of the at least one email target a corresponding custom email,	
wherein the custom email is formed from the email campaign template; and	The method of claim 1, wherein step (3) comprises the step of: (a) forming the custom email for each of the at least one email target from the generated text message template and the generated configuration file.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

As this comparison demonstrates, claim 1f uses an **email campaign template** to **form** the **custom email**, and that **email campaign template** is itself **generated** from a **message template** and **configuration file**, as I discussed above in claims 1c-1e. Claim 9, though, does not use an **email campaign template**. Rather, it **forms the custom email from a text message template and configuration file** directly. A POSITA would understand that, in the context of the '555 patent, a **text message template** and **message template** are synonymous. *See, e.g.*, Ex.1001 (6:62-66) (explaining that “custom email message 410” is, in part, “formed from” a “text message file”); Ex.1001 (8:61-63) (same, but referring to a “text message template”); Ex.1001 (9:21-22) (explaining that “the message template is text message file 320”).

142. “A number of engines” are disclosed by Bergh to “take campaigns in campaign store 620 and form offers for specific customers.” Ex.1002 (9:33-35). The “trigger” and “lifecycle engine[s]” wait for the customer to take some act or series of actions, like “registration” or “repeat purchase,” to form their offers. Ex.1002 (9:49-52, 9:60-63). A POSITA would understand from that disclosure that Bergh’s

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

trigger and lifecycle engines do not require an intermediately generated **email campaign template** because their offers are formed on an individual-customer basis—*i.e.*, once some act is or actions are complete—meaning they are formed directly from a **text message template** and **configuration file**.

143. Nagda similarly discloses an “output constructor” that “direct[s] the marketing material . . . to the customer via email” after it “generates direct marketing material comprised of the populated template.” Ex.1005 (3:12-25). A POSITA would understand from this disclosure, and Nagda’s disclosure or suggestion of a **configuration file**, which I discussed in claim 1e, that Nagda does not require an intermediately generated **email campaign template** to populate its template.

144. For at least those reasons, it is my opinion that claim 9 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

8. **Claim 10**

- a. [10a] **“The method of claim 1, wherein step (4) comprises the steps of: (a) receiving at least one response from the at least one email target; and”**

145. It is my opinion that claim 10a merely narrows claim 1g’s **tracking** requirement. Both claims recite as follows:

Claim 1g	Claim 10a
(4) tracking the custom email sent to each of the at least one email target.	The method of claim 1, wherein step (4) comprises the steps of: (a) receiving at least one response from the at least one email target; and

As this comparison demonstrates, claim 1g claims **tracking** generally. Claim 10a, though, specifically requires **receiving at least one response from the at least one email target**.

146. Bergh discloses that customer “response[s] to an offer” are “feedback,” which may include:

- **“receiv[ing]** a notification that the customer has read [an] email,” and
- **“solicit[ing]** an email **response**” from the customer.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Ex.1002 (4:43-45, 4:47-53). A POSITA would understand that Bergh's feedback generally and the aforementioned embodiments of feedback specifically as **responses that are received from at least one email target.**

147. A POSITA would have likewise known to **track** email campaigns sent over a computer network by **receiving responses from the email targets.** Doing so would have enabled a more-accurate picture of how the email campaign itself performed. For example, data like delivery statistics, open rates, deletions, and unsubscribes would have enabled a POSITA to assess how successful the campaign was. Capturing those statistics was well-known in the art, and POSITAs generally did so by **receiving** automated **responses.** And so even if Bergh did not disclose or suggest **receiving at least one response from the at least one email target,** a POSITA would have been motivated to modify Bergh to include that limitation.

148. For at least those reasons, it is my opinion that claim 10a is disclosed or suggested by Bergh and a POSITA's general knowledge.

b. [10b] “creating a campaign tracking list from said received at least one response.”

149. Bergh’s “reports” characterize “the effectiveness of various types of offers.” Ex.1002 (5:24-26). A POSITA would understand that as no different from **a campaign tracking list**, which the ’555 patent explains as including “various parameters,” such as “a number of respondents that requested deletion.” Ex.1001 (9:4-10). And for the same reasons discussed in claim 10a, a POSITA would understand that Bergh’s reports are **created from said received at least one response**.

150. More generally, **receiving responses** as part of email campaigns for use in creating reports, graphical or textual, on their effectiveness was well-known in the art by the late 1990s. POSITAs would include such functionality in email campaigns as a matter of course using standard techniques. As such, a POSITA would have been motivated to modify Bergh to include **receiving at least one response from the at least one email target** even if Bergh had not already disclosed or suggested such a limitation.

151. For at least those reasons, it is my opinion that claim 10b is disclosed or suggested by Bergh and a POSITA’s general knowledge.

9. Claim 11

- a. [11a] “The method of claim 10, wherein step (b) comprises the steps of: (i) determining a number of successful visits from the at least one email target;”**

152. It is my opinion that claim 11a merely narrows claim 10b’s **campaign tracking list**. Both claims recite as follows:

Claim 10b	Claim 11a
creating a campaign tracking list from said received at least one response.	The method of claim 10, wherein step (b) comprises the steps of: (i) determining a number of successful visits from the at least one email target;

As this comparison demonstrates, claim 10b claims **a campaign tracking list** generally. Claim 11a, though, specifically requires **determining a number of successful visits from the at least one email target**.

153. To that end, Bergh’s “reports” can “characterize[e] the effectiveness of various types of offers” by the “customer’s access to a Web server after an offer has been presented.” Ex.1002 (4:47-50, 5:25-26). A POSITA would understand that as

including **determining a number of successful visits from the at least one email target**. *See* Ex.1001 (7:48-49) (“[A] successful hit may be declared when an email recipient selects their customized URL[.]”).

154. For at least those reasons, it is my opinion that claim 11a is disclosed or suggested by Bergh and a POSITA’s general knowledge.

b. [11b] “(ii) determining a number of the custom email sent to the at least one email target that were undeliverable; and”

155. It is my opinion that claim 11b merely narrows claim 10b’s **campaign tracking list**. Both claims recite as follows:

Claim 10b	Claim 11b
creating a campaign tracking list from said received at least one response.	(ii) determining a number of the custom email sent to the at least one email target that were undeliverable; and

As this comparison demonstrates, claim 10b claims **a campaign tracking list** generally. Claim 11b, though, specifically requires **determining a number of the custom email sent to the at least one email target that were undeliverable**.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

156. To that end, Bergh’s “reports” can “characterize[e] the effectiveness of various types of offers” by “track[ing] the instances of offers sent to particular customers.” Ex.1002 (5:25-26, 8:14-15). Bergh also discloses that minimizing “unsubscribe[s]” and automatically “discard[ed] future offers” is an object of its invention. Ex.1002 (1:35-40). Further, determining delivery statistics, like the number of undeliverable emails in an email campaign, was standard practice of POSITAs by the late 1990s. A POSITA would thus understand from Bergh’s disclosures and its own general knowledge, then, that Bergh’s reports **determine a number of the custom email sent to the at least one email target that were undeliverable.**

157. For at least those reasons, it is my opinion that claim 11b is disclosed or suggested by Bergh and a POSITA’s general knowledge.

c. (iii) [11c] **“determining a number of the at least one email target that requested deletion.”**

158. It is my opinion that claim 11c merely narrows claim 10b’s **campaign tracking list**. Both claims recite as follows:

Claim 10b	Claim 11c
-----------	-----------

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

creating a campaign tracking list from said received at least one response.	(iii) determining a number of the at least one email target that requested deletion.
---	--

As this comparison demonstrates, claim 10b claims **a campaign tracking list** generally. Claim 11c, though, specifically requires **determining a number of the at least one email target that requested deletion.**

159. To that end, Bergh’s “reports” can “characterize[e] the effectiveness of various types of offers” by “track[ing] the instances of offers sent to particular customers,” and “solicit[ing] an email response” to an offer. Ex.1002 (5:25-26, 4:52, 8:14-15). And “provid[ing] a mechanism to ‘unsubscribe’ from all future offers” was well-known to POSITAs, as Bergh also notes. Ex.1002 (1:34-35). As noted above already in claim 11b, Bergh also discloses that minimizing “unsubscribe[s]” and automatically “discard[ed] future offers” is an object of its invention. Ex.1002 (1:35-40). A POSITA would also understand that **requesting deletion** in the context of claim 11 is synonymous with unsubscribing from future email campaigns. A POSITA would also understand that well-known techniques for providing a mechanism to unsubscribe from future offers include soliciting an email response—*i.e.*, an email with the word “UNSUBSCRIBE,” or similar, or an executable link a

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

user could follow to provide a programmatic response to unsubscribe from future campaigns. Given these disclosures by Bergh and a POSITA's general knowledge, a POSITA would understand that Bergh's reports **determine a number of the at least one email target that requested deletion.**

160. For at least those reasons, it is my opinion that claim 11c is disclosed or suggested by Bergh and a POSITA's general knowledge.

10. Claim 12

161. It is my opinion that claim 12 is substantially similar to claim 1. Both claims recite as follows:

Claim 1	Claim 12
[1a] A method for conducting an email campaign, comprising the steps of:	[12a] A system for generating and tracking an email campaign, comprising:
[1b] (1) receiving an email target database;	[12b] an email campaign generator that generates an email campaign template from an email target database, wherein said email target database comprises a plurality of email targets;
[1c] (2) generating an email campaign template related to at least one email target in the received email target database, wherein step (2) comprises:	

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

[1d] (a) generating a message template, and	[12e] wherein said email campaign template comprises a text message, and
[1e] (b) generating a configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template;	[12f] a configuration file that includes data from said email target database corresponding to each of said plurality of email targets.
[1f] (3) sending to each of the at least one email target a corresponding custom email, wherein the custom email is formed from the email campaign template; and	[12c] an email campaign engine that generates a custom email corresponding to each of said plurality of email targets, wherein said custom email is formed from said email campaign template, wherein said email campaign engine sends said custom email to each of said plurality of email targets; and
[1g] (4) tracking the custom email sent to each of the at least one email target. [10a] The method of claim 1, wherein step (4) comprises the steps of: (a) receiving at least one response from the at least one email target; and [10b] creating a campaign tracking list from said received at least one response.	[12d] a campaign tracker that receives a response corresponding to said sent custom email, and wherein said campaign tracker creates a campaign tracking list that includes said received response;

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

As this comparison demonstrates, claim 1 and claim 12 primarily differ in that claim 1 recites a **method** while claim 12 recites a **system**, as claims 1a and 12a disclose. The only other difference of note is that claim 1g claims **tracking** generally, while claim 12d claims the **campaign tracking list** of claim 10, which depends on claim 1.

162. For at least those reasons, it is my opinion that claim 12 is disclosed or suggested for the same reasons that claims 1 and 10. Claim 12 is also disclosed or suggested for the reasons below, illustrating that claims 12a-12f are all disclosed or suggested by Bergh, Nagda, and a POSITA's general knowledge.

a. [12a] “A system for generating and tracking an email campaign, comprising:”

163. Claim 12a is not limiting. It is mere preamble, explaining that its **system for generating and tracking an email campaign** is **comprised** of various steps—*i.e.*, claims 12b-12f. Even so, I have already explained, in the context of claim 1a, how Bergh discloses or suggests **an email campaign**. And that **email campaign**, as I discuss below in the context of claims 12b-12f, is disclosed or suggested by Bergh, Nagda, and a POSITA's general knowledge as being **generated** and **tracked**.

164. For at least those reasons, it is my opinion that claims 12a is disclosed or suggested by Bergh, Nagda, and a POSITA's general knowledge.

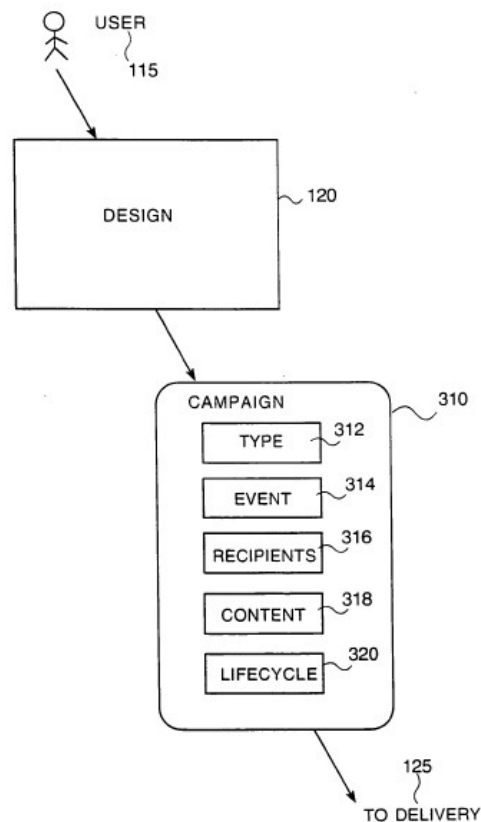
- b. [12b] “an email campaign generator that generates an email campaign template from an email target database, wherein said email target database comprises a plurality of email targets;”

165. Bergh's “design component” is used for “specify[ing] campaigns.”

Ex.1002 (6:57-58). Figure 3 illustrates. Ex.1002 (Sheet 3). An arrow runs from design component 120 to campaign 310. A POSITA would understand from both the disclosure from Bergh's specification (specifying campaigns) and Figure 3 (the

direction of the arrow) that Bergh's campaign is **generated** by the design component

FIG. 3



120, which acts as **an email campaign generator to generate an email campaign template.**

166. Figure 3 also discloses recipients 316 within campaign 310, which Bergh explains as “characteriz[ing] [the] particular customer or a class (e.g., a market segment) of customers 110 to whom the campaign is targeted.” Ex.1002 (7:1-3). Those customers identified within recipients 316 “can be based on a **database** query of customer profile **database** 150.” Ex.1002 (8:11-12). A POSITA would understand from those disclosures that Bergh’s design component **generates** its **email campaign template from an email target database, wherein said email target database comprises a plurality of email targets.**

167. For at least those reasons, it is my opinion that claim 12b is disclosed or suggested by Bergh and a POSITA’s general knowledge.

- c. [12c] **“an email campaign engine that generates a custom email corresponding to each of said plurality of email targets, wherein said custom email is formed from said email campaign template, wherein said email campaign engine sends said custom email to each of said plurality of email targets; and”**

168. A “[d]elivery component” is disclosed by Bergh. Ex.1002 (4:23). Bergh explains that “data structures holding data that specify characteristics of the offers to be sent according to [specified] campaigns” are passed from the design component, which I just discussed in the context of claim 12b, to the delivery component. Ex.1002 (6:57-60). To “personalize[]” the campaign’s offers, part of the data passed from the design component to the delivery component includes customer-specific data, like “customer[] name[s]” that must be “filled in” before sending the offers. Ex.1002 (8:24-26). From there, Bergh explains, the delivery component will “form offers,” using the data structures it receives from the design component, before delivering the offers to customers. Ex.1002 (9:28); *see also* Ex.1002 (8:26) (noting that “before delivery” takes place, the offers are personalized). A POSITA would understand from these disclosures that Bergh discloses or suggests its delivery component acts as **an email campaign engine that**

generates a custom email corresponding to each of said plurality of email targets, wherein said custom email is formed from said email campaign template.

169. Bergh's delivery component also uses "electronic mail message" to send "offers to appropriate customers." Ex.1002 (4:25-30). A POSITA would understand this as disclosing or suggesting that Bergh's delivery component also acts as an **email campaign engine that sends said custom email to each of said plurality of email targets.**

170. For at least those reasons, it is my opinion that claim 12c is disclosed or suggested by Bergh and a POSITA's general knowledge.

d. [12d] "a campaign tracker that receives a response corresponding to said sent custom email, and wherein said campaign tracker creates a campaign tracking list that includes said received response;"

171. To "deliver[]" and "track[] offers," an "offer management system" is disclosed by Bergh, with that offer management system including both "**tracking**" and "delivery" components. Ex.1002 Fig.1 (Sheet 1); Ex.1002 (3:8-9). Customer "feedback," Bergh explains, is received by the "delivery component," which may

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

include the delivery component receiving both “a notification that the customer has read the email” and “email **response[s]**.” Ex.1002 (4:44-53). A POSITA would understand these disclosures by Bergh—both the offer management system generally, and the delivery component specifically—as disclosing or suggesting **a campaign tracker that receives a response corresponding to said sent custom email.**

172. “A **tracking** component,” within Bergh’s offer management system, is further sent the customer feedback information from the delivery component, with the **tracking** component using the **received** customer feedback information to make various “reports.” Ex.1002 (5:18-19, 5:24-25). Reports produced by Bergh’s **tracking** component “characterize[] the effectiveness of offers,” which can include showing “[s]tatistics related to an effectiveness of the offers [*sic*].” Ex.1002 (2:27-28, 5:25-26). A POSITA would understand these disclosures by Bergh—both the offer management system generally, and the tracking component specifically—as disclosing or suggesting **a campaign tracker, wherein said campaign tracker creates a campaign tracking list that includes said received response.**

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

173. For at least those reasons, it is my opinion that claim 12d is disclosed or suggested by Bergh and a POSITA's general knowledge.

e. [12e] “wherein said email campaign template comprises a text message, and”

174. As I already discussed in the context of claim 12b, an **email campaign template** is disclosed or suggested by Bergh's design component. And as I already noted in the context of claim 9, a POSITA would understand that, in the context of the '555 patent, claim 9's **text message template** is synonymous with claim 1's **message template**. For at least the reasons I gave earlier for why those claim terms are synonymous, a POSITA would likewise understand that, in the context of the '555 patent, claim 12e's **text message** is synonymous with claim 1's **message template** and claim 9's **text message template**. Therefore, the same reasons that Bergh discloses or suggests a **message template** or **text message template** explain why Bergh discloses or suggests claim 12e's **text message**. And even if they did not, Bergh also explains that its “[c]ontent 318 specifies the content and layout of the information of an offer,” which “can be text.” Ex.1002 (8:21-23). A POSITA would understand that disclosure as encompassing a **text message**.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

175. For at least those reasons, it is my opinion that claim 12e is disclosed or suggested by Bergh and a POSITA's general knowledge.

f. [12f] **“a configuration file that includes data from said email target database corresponding to each of said plurality of email targets.”**

176. As I already discussed in the context of claim 12b, an **email campaign template** is disclosed or suggested by Bergh's design component. I also explained, in the context of claim 1e, that Nagda and a POSITA's general knowledge disclose or suggest **generating a configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template**. A POSITA would understand that, in the context of the '555 patent, a **configuration file that contains data related to each of the at least one email target** (claim 1e) is the same as one **including data from said email target database corresponding to each of said plurality of email targets** (claim 12f). Therefore, the same reasons that Nagda and a POSITA's general knowledge disclose or suggest claim 1e apply for why Nagda and a POSITA's general knowledge disclose or suggest claim 12f.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

177. I further note that Bergh explains that “portions” of its emails “need to be filled in (such as the customer’s name) before delivery,” and that “data structures holding data that specify characteristics of the offers to be send according to [the] campaign” are “passed to [the] delivery component.” Ex.1002 (6:58-60, 8:25-26). A POSITA would further understand from these disclosures that Bergh’s data structures passed to the delivery component (a **configuration file**, as disclosed or suggested by Nagda) contain the customer-specific data required to fill in the personalizable portions of Bergh’s emails (*i.e.*, that they **include data from said email target database corresponding to each of said plurality of email targets**).

178. For at least those reasons, it is my opinion that claim 12f is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

11. Claim 13: “The system of claim 12, wherein said email campaign engine makes a copy of said text message to generate said custom email.”

179. I have already discussed how claim 12 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge. I further noted that Bergh’s delivery component “forms offers” after “receiv[ing] campaigns from design

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

components,” Ex.1002 (9:26-28), and those campaigns include **text messages**, as I explained in claim 12. Indeed, all that separates claim 13 from claim 12 is that claim 13 requires **making a copy of said text message**. But a POSITA would understand that Bergh’ offers (**custom emails**) could be formed by **making a copy of said text message** before using **said text message to generate said custom email**. Indeed, doing so would have promoted data immutability, which was a standard design principle adhered to by POSITAs by at least the late 1990s and even still today. That is, the original **text message** would never have its data changed. Rather, only **copies** would have their customizable portions changed, leaving the original **text message** untouched. By leveraging data-immutability principles the POSITA would better enable data/code reusability and prevent unexpected bugs (*i.e.*, a lower incidence of errors). For at least those reasons, then it is my opinion that a POSITA would have been motivated to modify Bergh to **make a copy of said text message** before using **said text message to generate said custom email**.

180. For at least those reasons, it is my opinion that claim 13 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

12. Claim 14: “The system of claim 13, wherein said email campaign engine replaces at least one custom tag in said text message copy with a corresponding portion of said configuration file data.”

181. I have already explained how claim 13 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge. Techniques like **replacing at least one custom tag in said text message copy with a corresponding portion of said configuration file data**—commonly referred to, for example, as a “mail merge”—were already well-known to POSITAs by the late 1990s. Ex.1003 (1:59-62) (“The ability to merge text fields from a list has long been utilized for sending business correspondence and offers”). But even if it had not been, I also already explained, in the context of claim 1, how **custom tags being replaced with a corresponding portion of said configuration file data** is disclosed or suggested by Bergh and Nagda. Indeed, Bergh expressly discloses that customer-specific “portions” of emails must “be filled in (such as [with] the customer’s name) before delivery.” Ex.1002 (5:44-47).

182. For at least those reasons, it is my opinion that claim 14 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

13. **Claim 15: “The system of claim 12, wherein said email campaign generator comprises a custom uniform resource locator generator that creates a custom uniform resource locator address for each of said plurality of email targets, wherein said configuration file includes said custom uniform resource locator address in said data.”**

183. I have already explained how claim 12 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge. But I also note that Bergh’s design component is what “specif[ies]” the “content” of its campaigns, with the content being what “personalize[s]” offers, which can include filling in personalized “link[s] to content stored in the web offer database specifically for that customer.” Ex.1002 (Sheet 3, 3:58, 8:21-25, 10:63-66). Given these disclosures, **creating a custom uniform resource locator address for each of said plurality of email targets, wherein said configuration file includes said custom uniform resource locator address in said data** would have been understood by a POSITA as being disclosed or suggested by Bergh.

184. For at least those reasons, it is my opinion that claim 15 is disclosed or suggested by Bergh, Nagda, and a POSITA’s general knowledge.

B. Ground 2: Claims 1-6 and 9-15 are obvious over Calloway in view of Nagda

185. I have considered Calloway and Nagda. As my analysis below indicates, those references and a POSITA's general knowledge disclose or suggest every limitation of claims 1-6 and 9-15.

186. Because these limitations were all disclosed or suggested, it would have been trivial for a POSITA to combine prior art and general knowledge to arrive at the claimed invention. In other words, a POSITA using standard techniques would have had a reasonable expectation of success in making those combinations.

187. A POSITA would have also been motivated to make those combinations. The '555 patent seeks to make email campaigns more "effective," as well as improve the "efficien[cy]" of how they are "creat[ed] and track[ed]." Ex.1001 (1:33, 1:43-44). Calloway is no different. Its specification explains that prior art email campaigns had "los[t] effectiveness as a medium for attracting and retaining the attention of a customer." Ex.1003 (1:8-11). Nagda is similar. Its specification laments that prior art campaigns require "substantial human intervention" to overcome the ineffectiveness of uncustomized campaigns. Ex.1005

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

(1:35-47). In sum, the '555 patent, Calloway, and Nagda all share an identical or, at the very least, similar goal.

188. For at least those reasons, it is my opinion, then, that a POSITA would have been motivated to combine Calloway, Nagda, and general knowledge to arrive at claims 1-6 and 9-15.

189. For at least all those reasons, it is my opinion that claims 1-6 and 9-15 are obvious over Calloway in view of Nagda and a POSITA's general knowledge.

1. Claim 1

a. [1a] “A method for conducting an email campaign, comprising the steps of:”

190. Claim 1a is not limiting. It is mere preamble, explaining that its **method for conducting an email campaign is comprised** of various steps—*i.e.*, claims 1a-1g. Even so, Calloway discloses or suggests claim 1a to the extent it may be construed as limiting.

191. “[T]he deployment of individualized multimedia content as messages within an advertising **campaign** that targets and delivers an individualized **email** message to each recipient” is disclosed by Calloway. Ex.1003 (2:58-62). I also note

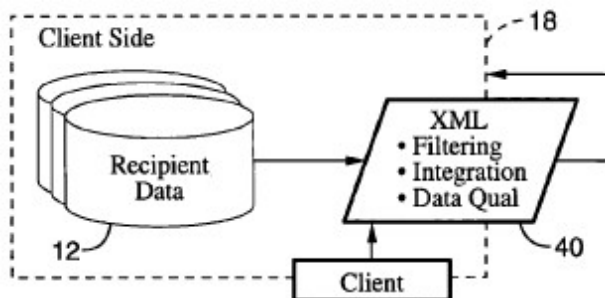
that an “advertising **campaign**” is synonymous with “**campaign**” in the context of Calloway. Ex.1003 (3:3-4). “[T]he action of sending individualized messages,” whether to “a single person, or any sized list of individuals,” applies equally to both Calloway’s advertising **campaigns** and **campaigns** generally. Ex.1003 (3:5-8).

192. For at least those reasons, it is my opinion that claim 1a is disclosed or suggested by Calloway if claim 1a is limiting.

b. [1b] “(1) receiving an email target database;”

193. As Calloway explains, its “advertising campaign . . . **targets** and delivers an individualized email message to each recipient,” with “[t]he list of recipients to which the messages are to be directed . . . contained within a recipient **database** that may be supplied by the client, or a third party,” and that “recipient **database** provid[ing] delivery information about the client, such as **email** address, along with various information about the recipient which may be utilized in the process of individualizing a message to that specific recipient.” Ex.1003 (2:60-62, 3:65-4:4). Having a **database** supplied by the client or a third party would be understood by a POSITA as meaning the **database** is to be **received**.

194. I also note Calloway's Figure 4, in which an arrow points from recipient database 12 to process 40. Ex.1003 (Sheet 4). Calloway draws similar arrows from recipient database 12 in Figures 1-3 as well. Ex.1003 (Sheets 1-3). A POSITA would understand the direction of these arrows indicating that a recipient **database** is **received**.



195. For at least those reasons, it is my opinion that Calloway and a POSITA's general knowledge disclose or suggest claim 1b.

- c. [1c] **“(2) generating an email campaign template related to at least one email target in the received email target database, wherein step (2) comprises:”**

196. Claim 1c is not limiting. It merely discloses **generating an email campaign template related to at least one email target in the received email target database** in a way that is **comprised** of various steps—*i.e.*, claims 1d and 1e. Even so, Calloway discloses or suggests claim 1c to the extent it may be limiting.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

197. Claim 1c requires a **received email target database**. A POSITA would see no difference between that and claim 1b's **receiving an email target database**, which I discussed above as being disclosed or suggested by Calloway and a POSITA's general knowledge.

198. The only remaining elements of claim 1c are **generating an email campaign template related to at least one email target**. But as I discuss below, that limitation is merely **comprised** of claims 1d and 1e, which are themselves disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge.

199. For at least those reasons, it is my opinion that claim 1c is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge, assuming claim 1c is limiting at all.

d. [1d] “(a) generating a message template, and”

200. The “preferred method of deploying the individualized messages,” explains Calloway, is to “utilize[] a standard email **template** containing a rich media **message** and a Macromedia flash file which is unique for that particular recipient,” which enables, among other things, recipients to “receive [a] **message** with

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

individualized audio and graphics,” the “[p]arameters vary[ing] based on [the] specific **template**.” Ex.1003 (3:48-51, 14:11-13); *see also* Ex.1003 (22:30-33) (“The multimedia engine, using an existing code library is capable of combining the email recipient information, as provided by a client, with existing email **message templates**.”). A POSITA would understand these disclosures as disclosures or suggesting **generating a message template**.

201. For at least those reasons, it is my opinion claim 1d is disclosed or suggested by Calloway and a POSITA’s general knowledge.

- e. **[1e] “(b) generating a configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template;”**

202. I explained above my opinion for why claim 1e is disclosed or suggested by Nagda and a POSITA’s general knowledge.

- f. [1f] **“(3) sending to each of the at least one email target a corresponding custom email, wherein the custom email is formed from the email campaign template; and”**

203. As I already noted above, the way Calloway prefers to “deploy[] the individualized messages” is to “utilize[] a standard **email template** containing a rich media message and a Macromedia flash file which is unique for that particular recipient.” Ex.1003 (3:48-51). Indeed, Calloway and Nagda disclose or suggest **generating an email campaign template**, as I explained already in the context of claims 1c-1e. A POSITA would understand from these disclosures that Calloway and Nagda disclose or suggest **the custom email is formed from the email campaign template**.

204. I further note that “[o]ne typical form of messaging campaign,” as explained by Calloway, “involves the sending of emails to a list of recipients.” Ex.1003 (4:31-33). A POSITA would understand from that disclosure, as well as the aforementioned deploying individualized messages, that Calloway and Nagda disclose or suggest **sending to each of the at least one email target a corresponding custom email**.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

205. For at least those reasons, it is my opinion that claim 1f is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge.

g. [1g] “(4) tracking the custom email sent to each of the at least one email target.”

206. Calloway's “campaign **tracking**” is extensively disclosed. Ex.1003 (15:41). Calloway **tracks** the **custom emails** it sends by **tracking**, among other measures, the:

- “date and time of stream playback,”
- “number of recipients opening the message,”
- “number that access the playback site (if not automatically activated),”
- “number of recipients sending the message to another party,”
- “time between message dispatch and recipient opening the message,”
- “interaction time of recipient (average, range),”
- “participation rate,”
- “click history within the message,” and
- “click-throughs to site.”

Ex.1003 (28:20-26). A POSITA would understand those disclosures as disclosing or

suggesting **tracking the custom email sent to each of the at least one email target**.

207. For at least those reasons, it is my opinion that claim 1g is disclosed or suggested by Calloway and a POSITA's general knowledge.

2. Claim 2: “The method of claim 1, wherein step (1) comprises the step of: (a) generating the email target database.”

208. It is my opinion that claim 2 is substantially similar to claim 1b. Both claims recite as follows:

Claim 1b	Claim 2
(1) receiving an email target database;	The method of claim 1, wherein step (1) comprises the step of: (a) generating the email target database.

As this comparison demonstrates, both claims require an **email target database**.

Claim 1b requires **receiving** it. But claim 2 requires **generating** it.

209. Calloway recognizes that a problem with client-provided data, *i.e.*, client-provided “recipient databases,” is that it “may contain errors, and data issues [that] should be resolved prior to using the data within the campaign.” Ex.1003 (31:10-13). To mitigate this problem, Calloway prefers to run “routines that are

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

capable of operating on the recipient database to minimize the errors and to resolve data issues”—*e.g.*, by running “a clean up routine for selective clean up of a recipient database by removing errors and unwanted redundancies.” Ex.1003 (31:13-16, 39:4-6). A POSITA would understand these techniques for mitigating the problems with client-provided data as disclosing or suggesting to **generate** a recipient database, which starts with receiving a client-provided recipient database (potentially with errors) and ends with one that has been cleaned up.

210. Furthermore, the client-provided recipient database must have been **generated** at some point because it includes “information about the recipient.” Ex.1003 (5:1-3). Simply to enable Calloway’s operation, then, a POSITA would have been motivated to modify Calloway to include a **generating** the recipient **database**.

211. Similar to Calloway, Nagda discloses that customer records include “information for the delivery method, *e.g.*, e-mail address.” Ex.1005 (4:40-43). Nagda further discloses that those customer records are included in a “**database**” that is “**generated** by a human operator” and/or “[an] automated creation and

delivery system.” Ex.1005 (2:6-17). A POSITA would understand those disclosures as disclosing or suggesting **generating the email target database**.

212. For at least those reasons, it is my opinion that claim 2 is disclosed or suggested by Calloway, Nagda, and a POSITA’s general knowledge.

3. Claim 3

a. [3a] **“The method of claim 2, wherein step (a) comprises the steps of: (i) collecting at least one raw document;”**

213. The first step in Calloway’s “five step process to ensure the quality of recipient information and email addresses” is to “Import [a] **raw** customer list into a table.” Ex.1003 (31:23-26). A POSITA would understand that a **raw** customer list is a **raw document**.

214. For at least those reasons, it is my opinion that claim 3a is disclosed or suggested by Calloway and a POSITA’s general knowledge.

b. [3b] **“(ii) parsing said collected at least one document;”**

215. A POSITA would have understood that claim 3a’s **at least one raw document** must be **parsed** for its information to be accessible by a computer.

Indeed, it would be a necessary step to completely “[i]mport [the] **raw** customer list into a table,” which Calloway discloses. Ex.1003 (31:23-26). For at least those reasons, it is my opinion that claim 3b is disclosed or suggested by Calloway and a POSITA’s general knowledge.

c. [3c] “(iii) categorizing said parsed at least one document into at least one category;”

216. One of the “primary capability[ies]” of the the “content management subsystem” that Calloway discloses (the subsystem that “is responsible for performing the process relating to access, organizing, and distributing data”) “is that of uploading groups of files using a simple Graphical User Interface (GUI).” Ex.1003 (15:44-46, 16:39-41). Indeed, “a client-user may access an upload screen . . . to upload data . . . from the client database to the system for use in developing their campaign.” Ex.1003 (16:57-61). “Once uploaded to the server,” Calloway continues, “the files are **categorized** in the SQL database and relevant information about the file is logged.” Ex.1003 (16:43-45). Further, and as discussed, claim 2 recites a method for **generating the email target database**. Claim 3 depends on claim 2, reciting claim 2’s method but using **raw documents** to **generate the**

email target database. Given that context, a POSITA would understand that categorizing files within the SQL database of Calloway when using **raw documents** requires **categorizing** the **parsed at least one document** containing each customer's information. I further note that while Calloway prefers to directly interface with a client's database, there are "situations" where that is not possible. *See* Ex.1003 (21:15-17). Calloway thus teaches implementing a "unique" application to "interface" between the client database and multimedia messaging system. Ex.1003 (21:20-21). Said interface allows for "data integration," other functionality, and "on-the-fly *data capture*," which a POSITA would understand as including **categorizing said parsed at least one document into at least one category.** Ex.1003 (21:21-24).

217. For at least those reasons, it is my opinion that claim 3c is disclosed or suggested by Calloway and a POSITA's general knowledge.

d. [3d] "(iv) inserting said at least one document into a database; and"

218. "[F]iles" are "categorized in [Calloway's] SQL **database**" once they are "uploaded to the server," Ex.1003 (16:43-45), which a POSITA would understand as including **inserting said at least one document into a database.**

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Calloway's unique interface applications, which I just discussed in claim 3c, would also be understood by a POSITA as including **inserting said at least one document into a database** given, among other things, that said applications allow for "data integration." *See* Ex.1003 (21:10-24). A POSITA would have also generally known that **documents** must be **inserted into a database** for them to later be retrievable. And so even if Calloway did not disclose or suggest claim 3d, a POSITA would have been motivated to modify Calloway to include it so that **parsed documents** could later be accessed through the recipient database.

219. For at least those reasons, it is my opinion that claim 3d is disclosed or suggested by Calloway and a POSITA's general knowledge.

e. [3e] “(v) removing documents from the database
corresponding to duplicate email addresses.”

220. As I already discussed above, Calloway “minimiz[es]” the “errors
and . . . data issues” present in received recipient databases with “routines that are

capable of operating on the
recipient database” to
clean it up. Ex.1003
(31:14-16). For example, a
raw customer list is shown
in Calloway’s Figure 2,
and I have highlighted
where **duplicate email
addresses** have been

TABLE 2				
Example of Data Quality Processing				
Part A				
	Name	Address	City	ST
1	John Smith	124 Oak St. #15	Los Angeles	CA
2	Smith John	124 Oak Ave.	Hollywood	
3	Lisa Smith	124 Oak #15		CA
4	Yakima Canute	124 Oak #10	Los Angeles	CA
5	John Smith	124 Oak St.	Hollywood	WI
Part B				
	email #1	email #2	Acct #	Phone
1	john@yahoo.com	John@dino.com	6001	3103491111
2	john@yahoo.com		6001	8185551717
3	john@yahoo.com	lisa@yahoo.com	6006	3105551234
4		yakima@my.com	8001	
5	johnsm@yahoo.com		7501	7155552223

included in the raw customer list. Ex.1003 (37:39-58); Ex.1003 (31:58-59) (“Are
records 1, 2, and 3 all duplicates?”). From there, determining whether those
duplicate email addresses “[s]hould . . . be eliminated” is disclosed as part of
Calloway’s routine. Ex.1003 (31:58).

221. For at least those reasons, it is my opinion that claim 3e is disclosed or suggested by Calloway.

4. **Claim 4: “The method of claim 1, wherein step (1) comprises the step of: (a) requesting an email target database according to a structured query language statement.”**

222. It is my opinion that claim 4 is substantially similar to claim 1b. Both claims recite as follows:

Claim 1b	Claim 4
(1) receiving an email target database;	The method of claim 1, wherein step (1) comprises the step of: (a) requesting an email target database according to a structured query language statement.

As this comparison demonstrates, both claims require an **email target database**. Claim 1b requires **receiving** it. But claim 4 requires **requesting** it **according to a structured query language statement**.

223. To that end, “[t]he core of the email campaigns” that Calloway discloses are its “**databases**,” which are preferably accessed through “**structured query language (SQL)**.” Ex.1003 (20:56-58). That includes having to “interface

with the recipient **databases** of various clients.” Ex.1003 (31:10-11). Given that **structured query language**-accessible, client-provided recipient **databases** are the core of Calloway’s email campaigns, a POSITA would understand that Calloway discloses or suggests **requesting an email target database according to a structured query language statement**.

224. For at least those reasons, it is my opinion that claim 4 is disclosed or suggested by Calloway and a POSITA’s general knowledge.

5. Claim 5: “The method of claim 1, wherein step (1) comprises the step of: (a) receiving an email target database from a database vendor.”

225. It is my opinion that claim 5 is substantially similar to claim 1b. Both claims recite as follows:

Claim 1b	Claim 5
(1) receiving an email target database;	The method of claim 1, wherein step (1) comprises the step of: (a) receiving an email target database from a database vendor.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

As this comparison demonstrates, both claims require an **email target database**. Claim 1b requires **receiving** it. And so does claim 5, though claim 5 adds that the **email target database** must be **received from a database vendor**.

226. “The list of recipients to which [Calloway’s] messages are to be directed is contained within a recipient **database** that may be supplied by a client, or a third party”—*i.e.*, the same recipient **database** that Calloway “use[s] to drive [email] customization” by “extract[ing]” customer-specific information. Ex.1003 (2:56-58, 4:65-67). A POSITA would understand that third parties include **database vendors**, meaning that Calloway discloses or suggests **receiving an email target database from a database vendor**.

227. For at least those reasons, it is my opinion that claim 5 is disclosed or suggested by Calloway and a POSITA’s general knowledge.

6. Claim 6

- a. [6a] “The method of claim 1, wherein step (b) comprises the steps of: (i) generating a custom uniform resource locator address for each of the at least one email target; and”**

228. Calloway provides its clients “with the ability to create . . . unique URL links associated with recipient[s]”—*e.g.*, by “embed[ing]” the “link to a unique URL . . . in a template.” Ex.1003 (23:13-15, 24:2-5). A POSITA would understand that creating unique URL links to embed in a template as part of an email campaign as **generating a custom uniform resource locator address for each of the at least one email target.**

229. For at least those reasons, it is my opinion that claim 6a is disclosed or suggested by Calloway and a POSITA’s general knowledge.

- b. [6b] “inserting the generated custom uniform resource locator address for each of the at least one email target into the configuration file.”**

230. Claim 6 depends on claim 1, and claim 1e requires **generating a configuration file to contain data related to each of the at least one email target, wherein the data is insertable in the generated message template.** Given that

context and because Calloway discloses “a link to a unique URL is embedded in a template” used for an email campaign, Ex.1003 (24:2-5), and because Nagda discloses or suggests that the customer information used to customize those email messages is stored in configuration files, as I discussed above, a POSITA would understand that Calloway’s unique URLs should be **inserted** into Nagda’s **configuration files**.

231. For at least those reasons, it is my opinion that claim 6b is disclosed or suggested by Calloway, Nagda, and a POSITA’s general knowledge.

7. Claim 9: “The method of claim 1, wherein step (3) comprises the step of: (a) forming the custom email for each of the at least one email target from the generated text message template and the generated configuration file.”

232. It is my opinion that claim 9 is simply a variation to how the **custom email** is **formed** in claim 1f. Both claims recite as follows:

Claim 1f	Claim 9
(3) sending to each of the at least one email target a corresponding custom email,	

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

wherein the custom email is formed from the email campaign template; and	The method of claim 1, wherein step (3) comprises the step of: (a) forming the custom email for each of the at least one email target from the generated text message template and the generated configuration file.
--	--

As this comparison demonstrates, claim 1f uses an **email campaign template** to **form** the **custom email**, and that **email campaign template** is itself **generated** from a **message template** and **configuration file**, as I discussed above in claims 1c-1e. Claim 9, though, does not use an **email campaign template**. Rather, it **forms the custom email from a text message template and configuration file** directly. A POSITA would understand that, in the context of the '555 patent, a **text message template** and **message template** are synonymous. *See, e.g.*, Ex.1001 (6:62-66) (explaining that “custom email message 410” is, in part, “formed from” a “text message file”); Ex.1001 (8:61-63) (same, but referring to a “text message template”); Ex.1001 (9:21-22) (explaining that “the message template is text message file 320”).

233. To the extent a client’s “email system” lacks “support[] [for] embedding of multimedia content” into emails, Calloway may use “alternate

templates” that, instead, directly embed into the **template** “a link to a unique URL” hosting the multimedia content. Ex.1003 (24:1-5). A POSITA would understand from that disclosure that Calloway’s alternative templates do not require an intermediately generated **email campaign template** because their emails are formed by directly embedding the link to a unique URL into the alternate template.

234. Nagda similarly discloses an “output constructor” that “direct[s] the marketing material . . . to the customer via email” after it “generates direct marketing material comprised of the populated template.” Ex.1005 (3:12-25). A POSITA would understand from this disclosure, and Nagda’s disclosure or suggestion of a **configuration file**, which I discussed in claim 1e, that Nagda does not require an intermediately generated **email campaign template** to populate its template.

235. For at least those reasons, it is my opinion that claim 9 is disclosed or suggested by Calloway, Nagda, and a POSITA’s general knowledge.

8. **Claim 10**

- a. **[10a] “The method of claim 1, wherein step (4) comprises the steps of: (a) receiving at least one response from the at least one email target; and”**

236. It is my opinion that claim 10a merely narrows claim 1g’s **tracking** requirement. Both claims recite as follows:

Claim 1g	Claim 10a
(4) tracking the custom email sent to each of the at least one email target.	The method of claim 1, wherein step (4) comprises the steps of: (a) receiving at least one response from the at least one email target; and

As this comparison demonstrates, claim 1g claims **tracking** generally. Claim 10a, though, specifically requires **receiving at least one response from the at least one email target**.

237. As I discussed in the context of claim 1g, Calloway discloses general “campaign tracking” as well as its specifics, for example, such as tracking the:

- “number of recipients opening the message,”
- “interaction time of recipient (average, range),” and
- “click history within the message.”

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Ex.1003 (15:41, 28:20-26). Calloway’s “unsubscribe” feature also requires a **“response”** from the **email target**, which is “logged upon receipt” and “report[ed]” as a “number and percentage of [unsubscribe **responses**]” as part of “normal campaign reporting mechanisms.” Ex.1003 (24:45-49, 26:44-45). A POSITA would understand these general and specific disclosures by Calloway as disclosing or suggesting **receiving at least one response from the at least one email target**.

238. A POSITA would have likewise known to **track** email campaigns sent over a computer network by **receiving responses from the email targets**. Doing so would have enabled a more-accurate picture of how the email campaign itself performed. For example, data like delivery statistics, open rates, deletions, and unsubsribes would have enabled a POSITA to assess how successful the campaign was. Capturing those statistics was well-known in the art, and POSITAs generally did so by **receiving** automated **responses**. And so even if Calloway did not disclose or suggest **receiving at least one response from the at least one email target**, a POSITA would have been motivated to modify Calloway to include that limitation.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

239. For at least those reasons, it is my opinion that claim 10a is disclosed or suggested by Calloway and a POSITA's general knowledge.

b. [10b] “creating a campaign tracking list from said received at least one response.”

240. Calloway generally discloses that its “reports” allow “clients to view the results of a **campaign** while it is underway,” which includes, among other things, using “information collected when recipients access [a] link” to feed “**campaign tracking**.” Ex.1003 (15:37-41). Calloway also specifically discloses that its “‘non-participant’ tables,” which Calloway has “creat[ed]” as “unsubscribe **response[s]** [are] logged,” list “parties that are not to be included in [Calloway’s] future campaigns.” Ex.1003 (26:44-47). A POSITA would understand that creating reports from information collected as links are accessed as well as creating non-participant tables from unsubscribe responses disclose or suggest **creating a campaign tracking list from said received at least one response**.

241. More generally, **receiving responses** as part of email campaigns for use in creating reports, graphical or textual, on their effectiveness was well-known in the art by the late 1990s. POSITAs would include such functionality in email

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

campaigns as a matter of course using standard techniques. As such, a POSITA would have been motivated to modify Calloway to include **receiving at least one response from the at least one email target** even if Calloway had not already disclosed or suggested such a limitation.

242. For at least those reasons, it is my opinion that claim 10b is disclosed or suggested by Calloway and a POSITA's general knowledge.

9. **Claim 11**

- a. **[11a] “The method of claim 10, wherein step (b) comprises the steps of: (i) determining a number of successful visits from the at least one email target;”**

243. It is my opinion that claim 11a merely narrows claim 10b’s **campaign tracking list**. Both claims recite as follows:

Claim 10b	Claim 11a
creating a campaign tracking list from said received at least one response.	The method of claim 10, wherein step (b) comprises the steps of: (i) determining a number of successful visits from the at least one email target;

As this comparison demonstrates, claim 10b claims **a campaign tracking list** generally. Claim 11a, though, specifically requires **determining a number of successful visits from the at least one email target**.

244. To that end, the “number [of recipients] that access [a] playback site (if not automatically activated)” is disclosed by Calloway as being reported on, as well as statistics like “click-throughs to site.” Ex.1003 (28:18-26). A POSITA would understand these disclosures as including **determining a number of successful**

visits from the at least one email target. *See* Ex.1001 (7:48-49) (“[A] successful hit may be declared when an email recipient selects their customized URL[.]”).

245. For at least those reasons, it is my opinion that claim 11a is disclosed or suggested by Calloway and a POSITA’s general knowledge.

b. [11b] “(ii) determining a number of the custom email sent to the at least one email target that were undeliverable; and”

246. It is my opinion that claim 11b merely narrows claim 10b’s **campaign tracking list**. Both claims recite as follows:

Claim 10b	Claim 11b
creating a campaign tracking list from said received at least one response.	(ii) determining a number of the custom email sent to the at least one email target that were undeliverable; and

As this comparison demonstrates, claim 10b claims **a campaign tracking list** generally. Claim 11b, though, specifically requires **determining a number of the custom email sent to the at least one email target that were undeliverable**.

247. To that end, “[d]elivery and interactivity statistics are logged in [Calloway’s] reporting subsystem and the results may be made available.” Ex.1003

(12:32-33). A POSITA would thus understand from these disclosures that Calloway **determines a number of the custom email sent to the at least one email target that were undeliverable.**

248. For at least those reasons, it is my opinion that claim 11b is disclosed or suggested by Calloway and a POSITA's general knowledge.

c. (iii) [11c] “determining a number of the at least one email target that requested deletion.”

249. It is my opinion that claim 11c merely narrows claim 10b's **campaign tracking list**. Both claims recite as follows:

Claim 10b	Claim 11c
creating a campaign tracking list from said received at least one response.	(iii) determining a number of the at least one email target that requested deletion.

As this comparison demonstrates, claim 10b claims **a campaign tracking list** generally. Claim 11c, though, specifically requires **determining a number of the at least one email target that requested deletion.**

250. To that end, recipients of Calloway's email campaigns may “unsubscribe,” that “unsubscribe response is logged upon receipt,” and Calloway's

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

“normal campaign reporting mechanisms preferably include reports of the number and percentage of [unsubscribe responses].” Ex.1003 (26:44-49). A POSITA would also understand that **requesting deletion** in the context of claim 11 is synonymous with unsubscribing from future email campaigns. A POSITA would also understand that well-known techniques for providing a mechanism to unsubscribe from future offers include soliciting an email response—*i.e.*, an email with the word “UNSUBSCRIBE,” or similar, or an executable link a user could follow to provide a programmatic response to unsubscribe from future campaigns. Given these disclosures by Calloway and a POSITA’s general knowledge, a POSITA would understand that Calloway’s reports **determine a number of the at least one email target that requested deletion.**

251. For at least those reasons, it is my opinion that claim 11c is disclosed or suggested by Calloway and a POSITA’s general knowledge.

10. Claim 12

252. I explain above in my discussion of why Bergh, Nagda, and a POSITA’s general knowledge disclose or suggest claim 12’s limitations why claim

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

12 is substantially similar to claim 1. That analysis applies equally to why Calloway, Nagda, and a POSITA's general knowledge disclose or suggest claim 12's limitations based on their disclosure or suggestion of claim 1's limitations. Still, Calloway, Nagda, and a POSITA's general knowledge also disclose or suggest claim 12's limitations for the reasons I articulate below.

a. [12a] **“A system for generating and tracking an email campaign, comprising:”**

253. Claim 12a is not limiting. It is mere preamble, explaining that its **system for generating and tracking an email campaign is comprised** of various steps—*i.e.*, claims 12b-12f. Even so, I have already explained, in the context of claim 1a, how Calloway discloses or suggests **an email campaign**. And that **email campaign**, as I discuss below in the context of claims 12b-12f, is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge as being **generated and tracked**.

254. For at least those reasons, it is my opinion that claims 12a is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge.

b. [12b] “an email campaign generator that generates an email campaign template from an email target database, wherein said email target database comprises a plurality of email targets;”

255. “[A] collection of processes, application and rules which, operating collectively, create . . . individualized messages” is disclosed by Calloway as a “multimedia engine,” said multimedia engine including an “HTML email **template builder**” as a “capabilit[y]/feature[.]” Ex.1003 (9:34-36, 22:29-30). Calloway’s recipient **database’s** “data” is “import[ed]” into Calloway’s multimedia engine, meaning that the multimedia engine imports as data “[t]he list of recipients to which the messages are to be directed,” as well as “various information about the recipient[s] which may be utilized in the process of individualizing . . . message[s]” for “specific recipient[s].” Ex.1003 (3:65-4:4, 22:63-66). A POSITA would understand from those disclosures that Calloway’s multimedia engine **generates its email campaign template from an email target database, wherein said email target database comprises a plurality of email targets.**

256. For at least those reasons, it is my opinion that claim 12b is disclosed or suggested by Calloway and a POSITA’s general knowledge.

- c. [12c] **“an email campaign engine that generates a custom email corresponding to each of said plurality of email targets, wherein said custom email is formed from said email campaign template, wherein said email campaign engine sends said custom email to each of said plurality of email targets; and”**

257. As I discussed above in claim 12b, Calloway’s multimedia engine includes “a collection of processes, applications and rules which, operating collectively, create . . . individualized messages,” and further “combin[es] the email recipient information . . . with existing email **templates.**” Ex.1003 (22:31-33). A POSITA would understand from these disclosures that Calloway discloses or suggests its multimedia engine acts as **an email campaign engine that generates a custom email corresponding to each of said plurality of email targets, wherein said custom email is formed from said email campaign template.**

258. Calloway’s multimedia engine is what, after a message has been formed, **“emails** the message.” Ex.1003 (22:63-66). A POSITA would understand this as disclosing or suggesting that Calloway’s multimedia engine also acts as an **email campaign engine that sends said custom email to each of said plurality of email targets.**

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

259. For at least those reasons, it is my opinion that claim 12c is disclosed or suggested by Calloway and a POSITA's general knowledge.

d. [12d] “a campaign tracker that receives a response corresponding to said sent custom email, and wherein said campaign tracker creates a campaign tracking list that includes said received response;”

260. The “in progress” monitoring of campaigns is provided by Calloway's “reporting and **tracking** subsystem,” which “provides . . . varying degrees of reporting and **tracking** capability.” Ex.1003 (10:14-20). The reporting and tracking subsystem collects various “[s]tatistics and information,” such as:

- “when recipients access [a] link,”
- the “number of recipients opening the message,”
- the “number of recipients sending the message to another party,”
- and executing the required steps for any “unsubscribe **response** [to be] logged upon receipt.”

Ex.1003 (15:37-41, 28:20-23, 26:44-47). A POSITA would understand these disclosures by Calloway as disclosing or suggesting **a campaign tracker that receives a response corresponding to said sent custom email.**

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

261. To the extent clients desire to “view the results of a **campaign** while it is underway,” Calloway’s reporting and **tracking** subsystem generates “reports” to show such results, including “‘non-participant’ table[s],” which show parties “that are not to be included in future campaigns.” Ex.1003 (26:46-48, 28:13-15). A POSITA would understand these disclosures by Calloway as disclosing or suggesting a **campaign tracker, wherein said campaign tracker creates a campaign tracking list that includes said received response.**

262. For at least those reasons, it is my opinion that claim 12d is disclosed or suggested by Calloway and a POSITA’s general knowledge.

e. [12e] “wherein said email campaign template comprises a text message, and”

263. As I already discussed in the context of claim 12b, an **email campaign template** is disclosed or suggested by Calloway’s multimedia engine. And as I already noted in the context of claim 9, a POSITA would understand that, in the context of the ’555 patent, claim 9’s **text message template** is synonymous with claim 1’s **message template**. For at least the reasons I gave earlier for why those claim terms are synonymous, a POSITA would likewise understand that, in the

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

context of the '555 patent, claim 12e's **text message** is synonymous with claim 1's **message template** and claim 9's **text message template**. Therefore, the same reasons that Calloway discloses or suggests a **message template** or **text message template** explain why Calloway discloses or suggests claim 12e's **text message**. And even if they did not, Calloway also explains that its "[m]ultimedia elements may be variously combined within an individualized message containing . . . text." Ex.1003 at Abstract. A POSITA would understand that disclosure as encompassing **a text message**.

264. For at least those reasons, it is my opinion that claim 12e is disclosed or suggested by Calloway and a POSITA's general knowledge.

f. [12f] **"a configuration file that includes data from said email target database corresponding to each of said plurality of email targets."**

265. As I already discussed in the context of claim 12b, an **email campaign template** is disclosed or suggested by Calloway's multimedia engine. I also explained, in the context of claim 1e, that Nagda and a POSITA's general knowledge disclose or suggest **generating a configuration file to contain data related to each**

of the at least one email target, wherein the data is insertable in the generated message template. A POSITA would understand that, in the context of the '555 patent, **a configuration file that contains data related to each of the at least one email target** (claim 1e) is the same as one **including data from said email target database corresponding to each of said plurality of email targets** (claim 12f). Therefore, the same reasons that Nagda and a POSITA's general knowledge disclose or suggest claim 1e apply for why Nagda and a POSITA's general knowledge disclose or suggest claim 12f.

266. I further note that Calloway explains that its "multimedia engine provided protocol[] **inserts** the data into the required **template**." Ex.1003 (23:7-8). A POSITA would further understand from this disclosure that Calloway's multimedia engine requires **data from said email target database corresponding to each of said plurality of email targets**, which could come from the **configuration file** disclosed or suggested by Nagda.

267. For at least those reasons, it is my opinion that claim 12f is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge.

11. Claim 13: “The system of claim 12, wherein said email campaign engine makes a copy of said text message to generate said custom email.”

268. I have already discussed how claim 12 is disclosed or suggested by Calloway, Nagda, and a POSITA’s general knowledge. I further note that Calloway’s multimedia engine “us[es] an existing code library [that] is capable of combining the email recipient information, as provided by a client, with existing email message templates, Ex.1003 (22:30-33), and that includes using **text messages**, as I explained in claim 12. Indeed, all that separates claim 13 from claim 12 is that claim 13 requires **making a copy of said text message**. But a POSITA would understand that Calloway’s individualized email messages (**custom emails**) could be formed by **making a copy of said text message** before using **said text message to generate said custom email**. Indeed, doing so would have promoted data immutability, which was a standard design principle adhered to by POSITAs by at least the late 1990s and even still today. That is, the original **text message** would never have its data changed. Rather, only **copies** would have their customizable portions changed, leaving the original **text message** untouched. By

leveraging data-immutability principles the POSITA would better enable data/code reusability and prevent unexpected bugs (*i.e.*, a lower incidence of errors). For at least those reasons, then it is my opinion that a POSITA would have been motivated to modify Calloway to **make a copy of said text message** before using **said text message to generate said custom email**.

269. For at least those reasons, it is my opinion that claim 13 is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge.

12. Claim 14: “The system of claim 13, wherein said email campaign engine replaces at least one custom tag in said text message copy with a corresponding portion of said configuration file data.”

270. I have already explained how claim 13 is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge. Techniques like **replacing at least one custom tag in said text message copy with a corresponding portion of said configuration file data**—commonly referred to, for example, as a “mail merge”—were already well-known to POSITAs by the late 1990s. Ex.1003 (1:59-62) (“The ability to merge text fields from a list has long been utilized for sending business correspondence and offers”). But even if it had not been, I also already

explained, in the context of claim 1, how **custom tags** being **replaced with a corresponding portion of said configuration file data** is disclosed or suggested by Calloway and Nagda. Indeed, Calloway expressly discloses that after “access[ing] the requisite data” it can have that data “insert[ed] . . . into the required template.” Ex.1003 (23:6-8).

271. For at least those reasons, it is my opinion that claim 14 is disclosed or suggested by Calloway, Nagda, and a POSITA’s general knowledge.

13. Claim 15: “The system of claim 12, wherein said email campaign generator comprises a custom uniform resource locator generator that creates a custom uniform resource locator address for each of said plurality of email targets, wherein said configuration file includes said custom uniform resource locator address in said data.”

272. I have already explained how claim 12 is disclosed or suggested by Calloway, Nagda, and a POSITA’s general knowledge. But I also note that Calloway’s multimedia engine “create[s] the individualized messages” in an email campaign, which includes “assembl[ing] a unique URL link to provide for click-back.” Ex.1003 (22:27-29, 22:37-38). Given these disclosures, **creating a custom uniform resource locator address for each of said plurality of email targets,**

wherein said configuration file includes said custom uniform resource locator address in said data would have been understood by a POSITA as being disclosed or suggested by Calloway.

273. For at least those reasons, it is my opinion that claim 15 is disclosed or suggested by Calloway, Nagda, and a POSITA's general knowledge.

C. Ground 3: Claims 7-8 and 16-17 are obvious over Calloway in view of Lerner

274. I have considered Calloway and Lerner. As my analysis below indicates, those references and a POSITA's general knowledge disclose or suggest every limitation of claims 7-8 and 16-17.

275. Because these limitations were all disclosed or suggested, it would have been trivial for a POSITA to combine prior art and general knowledge to arrive at the claimed invention. In other words, a POSITA using standard techniques would have had a reasonable expectation of success in making those combinations.

276. A POSITA would have also been motivated to make those combinations. The '555 patent seeks to make email campaigns more "effective," as well as improve the "efficien[cy]" of how they are "creat[ed] and track[ed]."

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Ex.1001 (1:33, 1:43-44). Calloway is no different. Its specification explains that prior art email campaigns had “los[t] effectiveness as a medium for attracting and retaining the attention of a customer.” Ex.1003 (1:8-11). Similarly, Calloway also discloses that “clients can view the results of a campaign while it is underway.” Ex.1003 (28:14-15). Lerner’s disclosure of a “URL content hash,” Ex.1004 (5:12-14), would have been recognized by a POSITA as enabling and/or improving Calloway’s “‘custom’ report[s],” which Calloway explains are “by [their] nature driven by a specialized client need, Ex.1003 (28:60-61).

277. For at least those reasons, it is my opinion, then, that a POSITA would have been motivated to combine Calloway, Lerner, and general knowledge to arrive at claims 7-8 and 16-17.

278. For at least all those reasons, it is my opinion that claims 7-8 and 16-17 are obvious over Calloway in view of Lerner and a POSITA’s general knowledge.

1. **Claim 7**

- a. [7a] **“The method of claim 6, wherein step (i) comprises the steps of: (A) generating a hash from a campaign ID, a message template version ID, a user reference ID, and a private key, for each of the at least one email target; and”**

279. I have already explained above why Calloway discloses or suggests **the method of claim 6**. I also note that Calloway “[p]refer[s]” to make its URLs “unique by the inclusion of a unique user ID,” Ex.1003 (24:6-7), which would be understood by a POSITA as disclosing or suggesting a **user reference ID**. I also note Calloway’s claim 48, which claims a system capable of “version control” through a “content management routine, Ex.1003 (42:20-21), which would be understood by a POSITA as disclosing or suggesting a **campaign ID** and **message template version ID**. I also note that Calloway prefers that “[a]ll activities within [its] system are password protected,” Ex.1003 (17:66-67), which would be understood by a POSITA as disclosing or suggesting a **private key**, especially as understood in the context of the ’555 patent, which explains that a “[p]rivate key 670 is a private key or password unique to the email campaign host, as would be understood by persons skilled in the

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

relevant art(s),” Ex.1001 (6:2-4). A POSITA would understand from those disclosures that, except for **generating a hash**, Calloway discloses or suggests all claim 7a’s elements.

280. Even so, Lerner discloses using a “standard **hash** function on the contents of . . . [Web-based documents]” to generate an “integer value,” which Lerner refers to as a “URL content **hash**.” Ex.1004 (5:12-14); Ex.1004 (14:64-66) (disclosing software that “**generates** [an] address by executing a standard **hash** function on the contents of the annotated [Web-based document]”). These disclosures would be understood by a POSITA as disclosing or suggesting **generating a hash**.

281. I also note that because Lerner utilizes a standard **hash** function, a POSITA would have also understood that the **campaign ID, message template version ID, user reference ID, and private key** that Calloway discloses or suggests could be used together to **generate a hash**. Indeed, it was well known by the late 1990s by POSITAs how to **generate a hash** from multiple values. Andrew Zola, *Definition: Hashing*, TECHTARGET (June 2021), techtarget.com/

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

searchdatamanagement/definition/hashing (“Hashing is the process of transforming any given key or a string of characters into another value.”); Katlyn Gallo, *What is Hashing? A Guide with Examples*, Builtin, builtin.com/cybersecurity/what-is-hashing (July 26, 2023) (“The idea of hashing was introduced in the early 1950s by an IBM researcher, Hans Peter Luhn. Although Luhn didn’t invent today’s algorithms, his work ultimately led to the first forms of hashing.”).

282. I again note that Calloway allows “clients [to] view the results of the campaign while it is underway,” Ex.1003 (28:14-15), which supports a motive for POSITAs to combine Lerner with Calloway because adding a **hash** would have enable more-granular custom reports by Calloway, which “by [their] nature [are] driven by a specialized client need,” Ex.1003 (28:60-61). As Lerner explains, such a combination would have been trivial given that Lerner uses a mere “standard hash function.” Ex.1004 (14:64-66).

283. For at least those reasons, it is my opinion that claim 7a is disclosed or suggested by Calloway, Lerner, and a POSITA’s general knowledge.

- b. [7b] **“(B) appending a first portion of the generated hash for each of the at least one email target to a host web address to form the custom uniform resource locator address for each of the at least one email target.”**

284. I have already discussed, in the context of claim 6, how a **custom uniform resource locator address for each of the at least one email target** is disclosed or suggested by Calloway. I also note that Calloway’s disclosure of “unique URL[s]” that “can be embedded within the email message,” Ex.1003 (4:37-38), would have been understood by a POSITA as disclosing or suggesting **custom resource locator addresses** that are unique to each **email**.

285. I further note just how common place it was for POSITA’s to use hashing in creating unique or custom URLs by the late 1990s and even now today. Indeed, the Gallo article I cited in claim 7a explains that long-known hashing “has many uses,” especially in email and secure communications. POSITAs frequently generate a **hash** and then **append** it to some known value to create the unique or custom URL they require.

286. For at least those reasons, it is my opinion that claim 7b is disclosed or suggested by a POSITA's general knowledge.

2. Claim 8

a. [8a] “The method of claim 7, wherein the host web address is equal to: hostname/module?token”

287. I have already explained above why **the method of claim 7** is disclosed or suggested by Calloway and Lerner. I also note that claim 8a is mere non-limiting preamble, having each of the elements of its **host web address (hostname, module, and ?token)** disclosed or suggested by Calloway, Lerner, and a POSITA's general knowledge, which I explain further in the context of claims 8b-8d.

288. For at least those reasons, it is my opinion that claim 8a is disclosed or suggested by Calloway, Lerner, and a POSITA's general knowledge.

b. [8b] “where hostname is replaced with an email campaign host Internet address,”

289. Claim 8b's **hostname** would be understood as merely requiring a standard URL **hostname**, which is the property of a URL containing the domain name. Indeed, the '555 patent agrees that it is claiming nothing other than an industry-standard **hostname**, explaining that by referring to a **hostname** it is

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

referring to “any addressable **Internet address**, such as ‘www.icplanet.com.’”

Ex.1001 (6:23-24). At least for those reasons, a POSITA would have generally known claim 8b.

290. I also note that “a unique URL,” which “can be embedded within the email message to open a browser for displaying the individualized multimedia message,” is disclosed by Calloway. Ex.1003 (4:38-39. Calloway’s multimedia message’s unique URL would be understood by a POSITA as including a **hostname** also.

291. For at least those reasons, it is my opinion that claim 8b is disclosed or suggested by Calloway and a POSITA’s general knowledge.

c. [8c] “**module is replaced with an identifier for software located at the email campaign host directed to processing the custom uniform resource locator address for each email target after it is selected, and**”

292. The **module** of claim 8c merely recites the well-known standard for a URL’s path, which, when followed by a browser, will cause the browser to access the **software located** at the distal end of the URL path. That is all to say, a POSITA would have generally known that **module is replaced with an identifier for**

software located at the email campaign host directed to processing the custom uniform resource locator address for each email target after it is selected.

293. I also note that Calloway’s “content manager” is used to “create[] the database and directory structure required by the multimedia engine to efficiently retrieve and process the rich media files used in an email campaign.” Ex.1003 (16:9-12); Ex.1003 (40:53-55) (“A system as recited in claim 22, wherein the content repository comprises a structured database having a directory hierarchy.”); Ex.1003 (44:27-30) (“A method as recited in claim 60, further comprising providing a database and directory structure for retrieving and processing multimedia files to be used in an email campaign.”). A directory structure would be understood by a POSITA as including a URL’s path—*i.e.*, the **module** of claim 8c. So a POSITA would also understand Calloway as disclosing or suggesting that **module is replaced with an identifier for software located at the email campaign host directed to processing the custom uniform resource locator address for each email target after it is selected.**

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

294. For at least those reasons, it is my opinion that claim 8c is disclosed or suggested by Calloway and a POSITA's general knowledge.

d. [8d] “token is replaced with any alphanumeric identifier for unique information related to the customized uniform resource locator address for each of the at least one email target.”

295. The **token** recited by claim 8d would be understood by a POSITA as a limited form of URL parameter, which is another standard component of a URL. Indeed, the '555 patent means nothing different, explaining that a “token” is merely a “replaceable parameter[.]” Ex.1001 (9:49-50). POSITAs have used URL parameters, including **tokens**, since the 1990s to pass additional information to a server as part of the request for the resource at the distal end of the URL. *See* Zack Bloom, *The History of the URL* (March 5, 2020), blog.cloudflare.com/the-history-of-the-url (“In 1992 Tim Berners-Lee created . . . the URL.”); *id.* (“If you’ve used the web for any period of time, you are familiar with query parameters. They follow the path portion of the URL, and encode options like ?name=zack&state=mi.”). That was because websites accessed through the HTTP protocol were originally created to be stateless, meaning that only static documents could be accessed. But POSITAs

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

removed this limitation, enabling the tracking of users, by adding alpha numeric identifiers for each user into the URL, creating customized URLs in the process. Indeed, this technique has been standard protocol for POSITAs since at least the mid-1990s. *See* Ex.1011 ¶ 3.3 (“An HTTP URL takes the form: http://<host>:<port>/<path>?<searchpart> where . . . <searchpart> is a query string.”).

296. For at least those reasons, it is my opinion that claim 8d would have been generally known by a POSITA.

3. **Claim 16**

- a. **[16a] “The system of claim 15, wherein said custom uniform resource locator generator generates a hash from a campaign ID, a message template version ID, a user reference ID, and a private key, for each of said plurality of email targets,”**

297. I have already discussed why **the system of claim 15** is disclosed or suggested by Calloway. I also note my opinion that the remainder of claim 16a is substantially similar to claim 7a. Both claims recite as follows:

Claim 16a	Claim 7a
The system of claim 15, wherein said custom uniform resource locator generator generates a hash from a campaign ID, a message template version ID, a user reference ID, and a private key, for each of said plurality of email targets	The method of claim 6, wherein step (i) comprises the steps of: (A) generating a hash from a campaign ID, a message template version ID, a user reference ID, and a private key, for each of the at least one email target; and

As this comparison demonstrates, both claims **generating a hash for each of [the at least one/said plurality of] email target[s]** from the same four elements: **a campaign ID, a message template version ID, a user reference ID, and a private key**. A POSITA would therefore understand that Calloway and Lerner disclose or

suggest wherein said custom uniform resource locator generator generates a hash from a campaign ID, a message template version ID, a user reference ID, and a private key, for each of said plurality of email targets for the same reasons that Calloway and Lerner disclose or suggest claim 7a.

298. For at least those reasons, it is my opinion that claim 16a is disclosed or suggested by Calloway, Lerner, and a POSITA’s general knowledge.

b. [16b] “and appends at least a portion of the generated hash to a host web address to form said custom uniform resource locator address for each of said plurality of email targets.”

299. It is my opinion that claim 16b is substantially similar to claim 7b. Both claims recite as follows:

Claim 16b	Claim 7b
and appends at least a portion of the generated hash to a host web address to form said custom uniform resource locator address for each of said plurality of email targets.	(B) appending a first portion of the generated hash for each of the at least one email target to a host web address to form the custom uniform resource locator address for each of the at least one email target.

As this comparison demonstrates, both claims require **appending** some **portion of the generated hash to a host web address to form a custom uniform resource locator address for each of [said plurality/the at least one] email target[s]**. A POSITA would therefore understand that claim 16b is disclosed or suggested for the same reasons that claim 7b is suggested.

300. For at least those reasons, it is my opinion that claim 16b is disclosed or suggested by a POSITA's general knowledge.

4. Claim 17

a. [17a] “The system of claim 16, wherein said host web address is equal to: hostname/module?token”

301. I have already explained above why claim 16 is disclosed or suggested by Calloway, Lerner, and a POSITA's general knowledge. Also, it is my opinion that claim 17a is substantially similar to claim 8a. Both claims recite as follows:

Claim 17a	Claim 8a
The system of claim 16, wherein said host web address is equal to: hostname/module?token	The method of claim 7, wherein the host web address is equal to: hostname/module?token

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

As this comparison demonstrates, and save for their respective dependencies to claim 16 and claim 7, claims 17a and claim 8a are identical. A POSITA would therefore understand that claim 17a discloses or suggests **wherein said host web address is equal to: hostname/module?token** for the same reasons that claim 8a does.

302. For at least those reasons, it is my opinion that claim 17a is disclosed or suggested by Calloway, Lerner, and a POSITA's general knowledge.

b. [17b] “where hostname is replaced with an email campaign host Internet address,”

303. It is my opinion that claim 17b is substantially similar to claim 8b. Both claims recite as follows:

Claim 17b	Claim 8b
where hostname is replaced with an email campaign host Internet address	where hostname is replaced with an email campaign host Internet address

As this comparison demonstrates, claims 17b and claim 8b are identical. A POSITA would therefore understand that claim 17b discloses or suggests **where hostname is replaced with an email campaign host Internet address** for the same reasons that

claim 8b does.

304. For at least those reasons, it is my opinion that claim 17b is disclosed or suggested by Calloway and a POSITA’s general knowledge.

c. [17c] “**module is replaced with an identifier for software located at the email campaign host directed to processing said custom uniform resource locator address for an email target after it is selected, and**”

305. It is my opinion that claim 17c is substantially similar to claim 8c. Both claims recite as follows:

Claim 17c	Claim 8c
module is replaced with an identifier for software located at the email campaign host directed to processing said custom uniform resource locator address for an email target after it is selected, and	module is replaced with an identifier for software located at the email campaign host directed to processing the custom uniform resource locator address for each email target after it is selected, and

As this comparison demonstrates, claims 17c and claim 8c are nearly identical, with a POSITA understanding that the sole difference in language—**for an email target** (claim 17c); **for each email target** (claim 8c)—not further limiting either claim. A POSITA would therefore understand that claim 17c discloses or suggests **module is replaced with an identifier for software located at the email campaign host**

directed to processing said custom uniform resource locator address for an email target after it is selected for the same reasons that claim 8c does.

306. For at least those reasons, it is my opinion that claim 17c is disclosed or suggested by Calloway and a POSITA's general knowledge.

d. [17d] “token is replaced with any alphanumeric identifier for unique information related to said custom uniform resource locator address for said email target.”

307. It is my opinion that claim 17d is substantially similar to claim 8d. Both claims recite as follows:

Claim 17d	Claim 8d
token is replaced with any alphanumeric identifier for unique information related to said custom uniform resource locator address for said email target.	token is replaced with any alphanumeric identifier for unique information related to the customized uniform resource locator address for each of the at least one email target.

As this comparison demonstrates, claims 17d and claim 8d are nearly identical, with a POSITA understanding that the sole difference in language—**said custom uniform resource locator address for said email target** (claim 17d); **the customized uniform resource locator address for each of the at least one email**

target (claim 8d)—not further limiting either claim. A POSITA would therefore understand that claim 17d discloses or suggests **token is replaced with any alphanumeric identifier for unique information related to said custom uniform resource locator address for said email target** for the same reasons that claim 8d does.

308. For at least those reasons, it is my opinion that claim 17d is would have been generally known by a POSITA.

VII. CONCLUSION

309. In signing this Declaration, I recognize that the Declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in this proceeding. If required, I will appear for cross-examination at the appropriate time.

310. I hereby declare that all statements made herein of my own knowledge are true and that all statements are made on information and belief are believed to be true, and further that these statements were made with the knowledge that

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

willfully false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

Declaration of Eric Cole, PH.D. in Support of
Petition for *Inter Partes* Review of
U.S. Patent No. 7,065,555 B2

Date: 8/30/2023

A handwritten signature in black ink, appearing to read 'Eric Cole', positioned above a horizontal line.

Eric Cole, Ph.D.