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17 *Attorneys for Defendants* ADOBE INC. &  
18 X.COMMERCE INC.

19 IN THE UNITED STATES DISTRICT COURT  
20 FOR THE NORTHERN DISTRICT OF CALIFORNIA  
21 SAN FRANCISCO DIVISION

22 EXPRESS MOBILE, INC.

23 Plaintiff,

24 vs.

25 ADOBE INC. D/B/A/ ADOBE SYSTEMS  
26 INC. AND X.COMMERCE, INC. D/B/A/  
27 MAGENTO,

28 Defendants.

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Case No. 3:20-cv-08297-RS

**DEFENDANTS ADOBE INC. AND  
X.COMMERCE, INC.'S INVALIDITY  
CONTENTIONS PURSUANT TO PATENT  
LOCAL RULE 3-3**

Ctrm: 3  
Judge: Richard Seeborg

would have been motivated to combine any one of the references identified by Defendants in reference to the '168 patent with any other of the references identified by Defendants in reference to the '168 patent in a manner that renders obvious the asserted claims of the '168 patent.<sup>11</sup>

**F. Prior Art Patents to the '755, '287, and '044 Patents**

Patent Number and Bates	Country of Origin	Date of Issue	Anticipation and/or Obviousness <sup>12</sup>	Exhibits <sup>13</sup>
6,990,654 ("Carroll")	U.S.	January 24, 2006	O	C3, D3, E3
7,266,370 ("Paddon Patent")	U.S.	September 4, 2007	A/O	C4, D4, E4
6,005,568 ("Simonoff")	U.S.	December 21, 1999	A/O	C5, D5, E5
8,667,415 ("Rudolph")	U.S.	March 4, 2014	O	C7, D7, E7
6,546,397 ("Rempell")	U.S.	Apr. 8, 2003	O	C17, D17, E17
8,819,542 ("Cudich")	U.S.	August 26, 2014	A/O	C37, D37, E37

**G. Prior Art Published Patent Applications to the '755, '287, and '044 Patents**

Publication Number and Bates	Country of Origin	Date of Publication	Anticipation and/or Obviousness <sup>14</sup>	Exhibits <sup>15</sup>
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<sup>11</sup> The arguments pertaining to the '397 patent apply equally to the '168 patent, since the references presented in these contentions as invalidating prior art with respect to the '168 patent are also presented as invalidity prior art for the '397 patent. Moreover, the '397 patent and '168 patent share a specification and are directed to highly similar claimed inventions, and a person of ordinary skill in the art would have been motivated to combine the same prior art references in a manner that renders obvious both claimed inventions.

<sup>12</sup> Specific claims that are anticipated and/or rendered obvious, or elements taught by these references are identified in the claim charts attached hereto. Defendants' identification of whether a particular reference anticipates or renders obvious the Patents-in-Suit is based upon Plaintiff's apparent positions as to claim scope.

<sup>13</sup> Exhibit C-\* indicates Defendants assert the reference against the '755 patent. Exhibit D-\* indicates Defendants assert the reference against the '287 patent. Exhibit E-\* indicates Defendants assert the reference against the '044 patent.

<sup>14</sup> Specific claims that are anticipated and/or rendered obvious, or elements taught by these references are identified in the claim charts attached hereto.

<sup>15</sup> Exhibit C-\* indicates Defendants assert the reference against the '755 patent. Exhibit D-\* indicates Defendants assert the reference against the '287 patent. Exhibit E-\* indicates Defendants assert the reference against the '044 patent.

2006/0063518 (“Paddon Application”)	U.S.	March 23, 2006	A/O	C4, D4, E4
2006/0200749 (“Shenfield”) <sup>16</sup>	U.S.	September 7, 2006	A/O	C11, D11, E11
EP 1 698 984 (“Shenfield”)	E.U.	September 6, 2006	A/O	C11, D11, E11
2005/0193380 (“Shenfield II”)	U.S.	September 1, 2005	O	C8, D8, E8
2006/0248121 (“Shenfield III”)	U.S.	November 2, 2006	A/O	C9, D9, E9
2005/0125771 (“Shenfield IV”)	U.S.	June 9, 2005	A/O	C10, D10, E10
2005/0273705 (“McCain”)	U.S.	December 8, 2005	A/O	C12, D12, E12
2007/0118844 (“Huang”)	U.S.	May 24, 2007	A/O	C13, D13, E13
2004/0243931 (“Stevens”)	U.S.	December 2, 2004	A/O	C16, D16, E16
2009/0013310 (“Arner”)	U.S.	January 8, 2009	A/O	C14, D14, E14
60/969,428 (“Arner”) <sup>17</sup>	U.S.	January 8, 2009	A/O	C14, D14, E14
03/081389 (“Greensage”)	W.O. / PCT/U.S.	October 2, 2003	A/O	C1, D1, E1
2006/0225032 (“de Klerk”)	U.S.	October 5, 2006	A/O	C19, D19, E19
2008/0222572 (“Nathan”)	U.S.	Sept. 11, 2008	A/O	C18, D18, E19
2006/0190580 (“Shu”)	U.S.	August 24, 2006	O	C32, D32, E32
2007/0282858 A1 (“Arner II”)	U.S.	December 6, 2007	A/O	C33, D33, E33
2004/0187090 (“Meacham”)	U.S.	September 23, 2004	A/O	C35, D35, E35
2002/0169852 (“Schaeck”)	U.S.	November 14, 2002	A/O	C36, D36, E36
2007/0094609 (“Gilboa”)	U.S.	April 26, 2007	A/O	C38, D38, E38
61/038241 (“Wong”)	U.S.	March 20, 2008	A/O	C40, D40, E40
2008/0201453 (“Assenmacher”)	U.S.	Aug. 21, 2008	A/O	C41, D41, E41
2005/0057560 (“Bibr”)	U.S.	March 17, 2005	A/O	C42, D42, E42
2006/0136422 (“Matveief”)	U.S.	June 22, 2006	A/O	C44, D44, E44
2004/0207659 (“Goodman”)	U.S.	October 21, 2004	A/O	C47, D47, E47
2005/0021756 (“Grant”)	U.S.	January 27, 2005	A/O	C48, D48, E48

#### H. Prior Art Publications to the ’755, ’287, and ’044 Patents

Title	Date of Publication	Author and Publisher	Anticipation and/or	Exhibits <sup>19</sup>
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<sup>16</sup> U.S. Patent Appl. Publ. No. 2006/0200749 and EP 1 698 984 have almost identical disclosures. Defendants have provided a chart with citations to EP 1 698 984, but the same disclosures can be found in U.S. Patent. Appl. Publ. No. 2006/0200749.

<sup>17</sup> U.S. Provisional Pat. Appl. 60/969,428 is incorporated by reference into U.S. Patent. Appl. Publ. No. 2009/0013310. Each Arner reference can be considered independently. A chart showing how the disclosure of U.S. Provisional Pat. Appl. 60/969,428 provides 35 U.S.C. § 112 support for the claims appearing in U.S. Patent. Appl. Publ. No. 2009/0013310 is included as an appendix to each of claim charts C-14, D-14, and E-14.

<sup>19</sup> Exhibit C-\* indicates Defendants assert the reference against the ’755 patent. Exhibit D-\* indicates Defendants assert the reference against the ’287 patent. Exhibit E-\* indicates Defendants assert the reference against the ’044 patent.

1 BROWN0002633, BROWN0002634, BROWN0002639). Thus, a POSITA would have been motivated  
2 to modify Akira's system to utilize a web services registry, as disclosed in Xpressmo, as a POSITA  
3 would have understood that the address of the web service and symbolic names of the inputs and outputs  
4 of the web services are necessary pieces of information to access the web service.

5 In addition, Akira discloses storing and retrieving information representative of said defined UI  
6 object and related settings in a database, and that the Player utilizes information stored in said database to  
7 generate for the display of at least a portion of one or more web pages. Akira discloses that the Response  
8 Director utilizes 5 database tables, 3 that are for lookup only and 2 that are write only.  
9 (BROWN0002542 at BROWN0002544). Once the phone characteristics are determined, the Response  
10 Director utilizes the AkiraOne File Database to send the appropriate file to the device.  
11 (BROWN0004967 at BROWN0004990). A POSITA would have found Akira's disclosures of storing  
12 and retrieving information representative of the defined UI object and related settings in a database, and  
13 the Player utilizing information in said database to generate for the display of at least a portion of one or  
14 more web pages relevant to and compatible with implementing Xpressmo's system. Xpressmo similarly  
15 discloses that it uses the Xpressmo Response Director to detect handset characteristics and serve the  
16 correct application to each respective handset - whether MIDP 2.0, HTML, or WAP. ("Xpressmo - The  
17 Publishing and Deployment Platform for Mobile Devices, About Us" at 2). A POSITA would have  
18 understood that storing information related to the correct application for each respective handset and  
19 device differences in a database would improve system performance by enabling the Response Director  
20 to efficiently search the database for the correct settings and application for each respective handset.

21 For at least the reasons discussed in the Akira and Xpressmo references, an ordinary artisan  
22 would be motivated to create device independent application authoring tools that store symbolic names  
23 required for evoking one or more web components and the address of the web service in a registry, and  
24 further that stores information representative of defined UI object and settings in a database that the  
25 Player utilizes to generate the display of at least a portion of one or more web pages.

26 **6. Motivations to Combine - Huang and Shenfield (U.S. Patent Application**  
27 **Publication No. 2006/0200749)**

28 A POSITA would have looked to *Shenfield* because it is in the same field and pursues the same  
objective (cross-functionality) as *Huang*. *Shenfield*, like *Huang*, relates to the "communication of  
services over a network." (Shenfield, ¶[0001]; *see also* Huang, ¶[0002] ("This invention relates to ...  
web services.")) Both address the problem of web-service cross-functionality across multiple platforms.  
(*See* Shenfield, ¶[0003] (stating need for programs "that can be run on client devices having a wide  
variety of runtime environments"), ¶[0005] (same); Huang, Abstract ("allow use of web services across

1 organizations”), ¶[0003] (“integrating various software applications with one [an]other”).) A POSITA  
2 would have recognized that *Shenfield* and *Huang* are in the same technical field and address substantially  
3 similar problems as the ’755 patent and, therefore, would have looked to and considered the teachings of  
4 *Shenfield* when implementing *Huang*’s system.

5 A POSITA would have found *Shenfield*’s disclosures of utilizing a web-services registry relevant  
6 to and compatible with implementing *Huang*’s system. For example, *Huang* discloses generating  
7 mapping files (or adaptors) that relate its “Generic WS Object Model 130” to vendor-specific objects by  
8 “access[ing] a WSDL (Web Service Definition Language) description for each vendor” via, for example,  
9 SOAP. (Huang, ¶[0008], [0044]-[0045], [0077].) A POSITA would have understood that *Shenfield*  
10 discloses accessing the same information “in a Universal Discovery Description and Integration (UDDI)  
11 services registry” and utilizing the same protocol “Simple Object Access Protocol (SOAP)” to allow  
12 “client devices 100” to communicate with the web service (*Shenfield*, ¶[0025]) and, therefore, *Huang*’s  
13 system could be readily modified to utilize a web services registry, such as the UDDI registry disclosed  
14 in *Shenfield*. A POSITA would further understand that *Shenfield* discloses storing a registry in a  
15 computer memory (i.e., application repository 700) (*Shenfield*, ¶[0044]) that stores similar data, performs  
16 similar functions, and is connected to the system and end-users in a similar manner, such that it is  
17 analogous to *Huang*’s database 124.

18 A POSITA would have understood that the *registry* of the modified *Huang-Shenfield* system  
19 would include *Huang*’s web components (i.e., *Huang*’s “Opportunity” object in the “Generic WS Object  
20 Model 130”), the *symbolic names* of the inputs and outputs of web services (i.e., *Huang*’s  
21 “OpportunityName” and “OpportunityId” attributes for the “Opportunity” object), and their addresses.  
22 *Huang* explains that its symbolic names for web service objects (*web components*) and their attributes  
23 (*inputs and outputs*) are necessary intermediaries to interact with web services. Further, a POSITA  
24 would have recognized that an address of the web service, such as the URL, would be a necessary piece  
25 of information to access the specified web service. Indeed, *Huang* confirms such information is  
26 necessary, including the symbolic names and address of the web service in its exemplary binding.  
27 (Huang, ¶[0139].)

28 A POSITA would have understood that the registry must contain all necessary information, such

1 as the binding information used in *Huang*'s system, to access a web service and, therefore, would have  
2 found including in the registry *Huang*'s symbolic names and web-service addresses obvious.

3 Indeed, a POSITA would have been motivated to modify the system of *Huang* to utilize a registry  
4 of web components (e.g., *Huang*'s "Opportunity" object in the "Generic WS Object Model 130"), the  
5 symbolic names of the inputs and outputs of web services (e.g., *Huang*'s "OpportunityName" and  
6 "OpportunityId" attributes for the "Opportunity" object), and their addresses. For example, doing so  
7 would improve system performance by eliminating the need to analyze each web service for web  
8 components and the associated inputs and outputs on a per request basis. (Huang, ¶¶[0049] ("The  
9 WSManger 127 may be invoked by the Designer 104, e.g., to get a list of web service objects.")) A  
10 registry would further enable a user of *Huang*'s system to search for web services rather than requiring  
11 pre-existing knowledge of a specific web service, its capabilities, and its address. (*Id.*) Including the  
12 address of a web service in the registry would allow the user interface of *Huang* to maintain its  
13 functionality of using a web address as an input to identify the relevant, available web services (and the  
14 corresponding symbolic names) from the registry. (Huang, ¶¶[0077], [0105], Fig. 3.)

15 Additionally, utilizing a registry of the symbolic names of *Huang* would have been a  
16 straightforward, conventional way to implement a system that accesses web services. A POSITA would  
17 have known that symbolic names were used for accessing various types of data and services. (U.S.  
18 Patent No. 7,873,625, Abstract, 1:10-11, 1:39-40; U.S. Patent Application Publication No.  
19 2006/0230462, ¶¶[0005], [0032], [0035].) Therefore, a POSITA would have found implementing a  
20 registry in the above manner an obvious option to simplify and streamline data processing and record-  
21 keeping relating to *Huang*'s web services. A POSITA would also have been motivated to store the  
22 registry in *Huang*'s database 124 to leverage already-existing data stores in *Huang*'s system.

23 A POSITA would also have had a reasonable expectation of success. First, the use of registries  
24 containing symbolic names and addresses in the context of web services was common and well known.  
25 (U.S. Patent Application Publication No. 2007/0067421, ¶¶[0005]-[0007], Figs. 1-2; Shenfield, ¶¶[0025],  
26 [0044]; *see also* Prosecution History of U.S. Patent No. 9,063,755, 1068-69 (explaining WSDL provides  
27 symbolic names for web services).) Thus, a POSITA would have known how to implement such a  
28 registry in *Huang*'s system without disrupting system function. Second, *Huang*'s system utilizes data

1 formats (SOAP and WSDL) consistent with the information available on well-known web services  
2 registries, including those disclosed in *Shenfield*, such that modifying *Huang*'s system to incorporate  
3 such a feature would have been easy for a POSITA to implement. (*Id.*) Third, *Huang*'s system includes  
4 a comparable data store (database 124) to *Shenfield*'s application repository 700 that could store the  
5 registry. (*Id.*) Indeed, the above modification would have been a mere combination of known  
6 components and technologies to produce predictable results. (*Id.*) See *KSR Int'l Co. v. Teleflex Inc.*, 550  
7 U.S. 398, 416 (2007).

8 Further, a POSITA would have been motivated to modify *Huang*'s Designer 104 with *Shenfield*'s  
9 solution of "platform-specific" presentation and workflow components to enable *Huang*'s applications to  
10 accommodate the resource constraints of less-powerful, internet-accessible devices. In view of  
11 *Shenfield*'s disclosures that explain that native applications "provid[e] a relatively optimized application  
12 program for each runtime environment" over other "resource intensive" solutions, that its "component  
13 applications 105 may be executed as native code or interpreted by another software module" (which a  
14 POSITA would have understood to include web browsers), and that its invention maintains the principle  
15 "write once run everywhere" (*Shenfield*, ¶¶[0005], [0029], [0056]), a POSITA would have been  
16 motivated to implement *Shenfield*'s device-specific components (*Player that is a device-dependent code*)  
17 in *Huang*'s system to achieve the same benefits and better tailor operation of its applications on a wider  
18 range of devices. Specifically, a POSITA would have been motivated to replace *Huang*'s players with  
19 *Shenfield*'s device-specific code (*player*) that can be tailored to provide instructions that optimize the  
20 display of content specified in *Huang*'s device-independent applications for each runtime environment,  
21 thus improving performance and user experience for a broader set of end users. (*Id.*; *Shenfield*, ¶¶[0005],  
22 [0029], [0056]; see also *id.*, ¶[0054].)

23 Further, a POSITA would have had a reasonable expectation of success in implementing  
24 *Shenfield*'s device-dependent components to the system of *Huang*. Specifically, *Shenfield*'s device-  
25 specific components would have been compatible with *Huang*'s device-independent components because  
26 *Huang*'s application and *Shenfield*'s device-independent components utilize similar code (*Huang*'s XML  
27 definitions (*Huang*, ¶¶[0008], [0042], [0059]) versus *Shenfield*'s "structured definition language"  
28 (*Shenfield*, ¶[0040]), including XML (*id.*, ¶[0046])). Further, *Shenfield*'s platform-specific presentation

1 components and device-specific workflow components would operate similarly to the functionality of  
2 *Huang*'s player, executing an application and providing instructions that are interpreted by the runtime  
3 environment.

4 Further, in view of *Huang*'s suggestion and *Shenfield*'s disclosure of a system that generates both  
5 the application and player, a POSITA would have been motivated to produce the player using *Huang*'s  
6 designer in the *Huang-Shenfield* system. Indeed, because *Huang*'s designer already generates code, a  
7 POSITA would have found doing so beneficial because this design would efficiently leverage the same  
8 software to generate platform-specific components. Indeed, altering *Huang*'s system to generate a player  
9 that allows for the presentation of its application, as disclosed in *Shenfield*, would have been a simple  
10 substitution of known elements to achieve predictable results.

## 11 **II. GROUNDS OF INVALIDITY BASED ON 35 U.S.C. § 112, ¶¶ 1, 2 PER PATENT LOCAL** 12 **RULE 3-3(D)**

### 13 **A. Written Description, Enablement, and Indefiniteness for the '397 and '168 Patents**

14 The '397 Asserted Claims are invalid for lack of written description and enablement under 35  
15 U.S.C. § 112, ¶ 1, and for failing to particularly point out and distinctly claim the subject matter that the  
16 applicant regards as his invention under 35 U.S.C. § 112, ¶ 2. Defendants reserve the right to supplement  
17 these Invalidity Contentions to further identify bases for invalidity under 35 U.S.C. § 112, ¶¶ 1 & 2.

#### 18 **1. '397 Patent: Written Description**

19 To satisfy the written description requirement, the specification must demonstrate that the  
20 patentee possessed the full scope of the claimed invention as of the filing date of the patent. *Ariad*  
21 *Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc); *ICU Med., Inc. v. Alaris*  
22 *Med. Sys., Inc.*, 558 F.3d 1368, 1376-79 (Fed. Cir. 2009); *LizardTech, Inc. v. Earth Resource Mapping,*  
23 *Inc.*, 424 F.3d 1336, 1344-47 (Fed. Cir. 2005). If the specification demonstrates that the inventor  
24 possessed only some, but not all, embodiments encompassed by a claim, the claim is invalid under the  
25 written-description requirement. *ICU*, 558 F.3d at 1376-79 (affirming summary judgment that claims to  
26 medical valves were invalid where claims encompassed both spiked and spikeless valves but  
27 specification described only spiked valves); *LizardTech*, 424 F.3d at 1337-39 (affirming summary  
28 judgment that broad claims to seamless image compression were invalid where specification described



1 Dated: July 19, 2021

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