1	IN THE UNITED STATES DISTRICT COURT	1
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA	2
3		3
4	BO SHANG,	4
5	Plaintiff (Pro Se),	5
6	v.	6
7	TWITCH INTERACTIVE, INC.,	7
8	[Proposed New Defendant] APPLE INC.,	8
9	ALPHABET INC. (GOOGLE),	9
10	Defendants.	10
11		11
12	Case No.: 3:24-cv-06664-JSC	12
13		13
14	PLAINTIFF'S MOTION FOR LEAVE TO FILE FIRST AMENDED COMPLAINT AND	14
15	TO JOIN APPLE INC. AS A DEFENDANT; AND	15
16	[PROPOSED] FIRST AMENDED COMPLAINT FOR INJUNCTIVE	16
17	RELIEF, DAMAGES, DECLARATORY JUDGMENT, AND OTHER RELIEF	17
18	JURY TRIAL DEMANDED	18
19		19
20		20
21	PLEASE TAKE NOTICE that Plaintiff, pro se, hereby moves this Court for leave to file a First Amended Complaint	21
22	and to add Apple Inc. as a newly joined Defendant, pursuant to Federal Rules of Civil Procedure 15(a)(2), 19, 20, and	22
23	21. In support of this motion, Plaintiff respectfully shows the Court as follows:	23
24		24
25	MOTION FOR LEAVE	25
26		26
27	1. Pursuant to Judge Scott Corley's Order issued on or about January 9, 2025 (Dkt. No. 30), the Court directed	27
28	Plaintiff to clarify and refile claims consistent with the Court's ruling on prior allegations against Twitch Interactive,	28
29	Inc. ("Twitch"). Plaintiff was further directed that if he intends to bring claims against Apple Inc., he must file the	29
30	appropriate motion to amend the complaint and join Apple as a defendant, rather than simply filing new claims on the	30
31	existing docket.	31
32		32
33	2. Plaintiff respectfully submits that good cause exists to grant leave to file this First Amended Complaint, as it	33
34	reflects compliance with the Court's Order, clarifies Plaintiff's causes of action, removes certain previously dismissed	34
•		

35	constitutional claims against private actors, and properly joins Apple Inc. given the related subject matter and	35
36	overlapping factual and legal issues. Plaintiff has also included Alphabet Inc. (Google) as a defendant for the same	36
37	reasons previously stated.	37
38		38
39	3. The proposed First Amended Complaint is attached below in its entirety. No party would be unduly prejudiced by	39
40	granting leave, especially given that these issues arise from the same or closely related transactions or occurrences	40
41	involving the technology sector's allegedly unfair or unlawful business practices.	41
42		42
43	WHEREFORE, Plaintiff respectfully requests that the Court GRANT this Motion for Leave to File First Amended	43
44	Complaint and to Join Apple Inc. as a Defendant.	44
45		45
46	Dated: January 12, 2025	46
47		47
48		48
49	Signature:	49
50	BO SHANG (Pro Se)	50
51	10 McCafferty Way	51
52	Burlington, MA 01803	52
53	Phone: 781-999-4101 or 617-618-8279	53
54	Email: bo@pdfsage.org boshangsoftware@proton.me	54
55		55
56		56
57	[PROPOSED] FIRST AMENDED COMPLAINT	57
58		58
59		59
60	IN THE UNITED STATES DISTRICT COURT	60
61	FOR THE NORTHERN DISTRICT OF CALIFORNIA	61
62		62
63	Bo Shang (Pro Se), Developer TeamID HUPDNC4PWJ,	63
64	Plaintiff,	64
65	${f v}.$	65
66	Twitch Interactive, Inc.;	66
67	Apple Inc. (NEWLY JOINED DEFENDANT);	67
68	Alphabet Inc. (Google),	68

69	Defendants.	69
70		70
71	Case No.: 3:24-cv-06664-JSC	71
72		72
73	FIRST AMENDED COMPLAINT FOR INJUNCTIVE RELIEF,	73
74	DAMAGES, DECLARATORY JUDGMENT, AND OTHER RELIEF	74
75	JURY TRIAL DEMANDED	75
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77		77
78	1. INTRODUCTION	78
79		79
80	1.1 Plaintiff, pro se, hereby files this First Amended Complaint in compliance with the Court's directives (Dkt. No.	80
81	30) and in accordance with Federal Rules of Civil Procedure 15(a)(2), 19, 20, and 21. This Amended Complaint	81
82	re-asserts and clarifies claims against Defendant Twitch Interactive, Inc. ("Twitch") and seeks to join Apple Inc.	82
83	("Apple") and Alphabet Inc. ("Google"), collectively "Defendants," for conduct involving unfair or unlawful business	83
84	practices, unconscionable reverse engineering ("RE") clauses, and unauthorized private "taxation."	84
85		85
86	1.2 Plaintiff's initial lawsuit against Twitch included allegations of constitutional violations under the First and	86
87	Fourteenth Amendments. The Court held that such claims are not viable against a private entity. Plaintiff now	87
88	proceeds against Twitch under California's Unfair Competition Law (Cal. Bus. & Prof. Code § 17200, et seq.) and	88
89	related theories, clarifying that Twitch's conduct may violate federal and state laws related to potential illegal	89
90	gambling or money laundering, thereby triggering the "unlawful," "unfair," or "fraudulent" prongs of Section 17200.	90
91		91
92	1.3 Plaintiff adds Apple and Google as Defendants because each imposes or enforces restrictive Terms of Service	92
93	("TOS") or license agreements that forbid or severely limit reverse engineering ("RE"). Plaintiff contends that these	93
94	RE prohibitions, combined with significant platform fees or commissions (including Apple's "30% tax," Google's	94
95	similar fee structure, and Twitch's TOS that hamper investigations), violate fundamental principles of fair commerce,	95
96	hamper national security, and infringe upon legitimate security research.	96
97		97
98	1.4 Plaintiff additionally states that he has been compelled to open source extremely high-quality execution hijacking	98
99	starter code and an accompanying guide for SMBv2, with the intent to deter or discourage despicably immoral and	99
100	torturous treatment from the Massachusetts (MA) government and Department of Mental Health (DMH). Plaintiff	100
101	assumes that good people within the cybersecurity community will follow a proper Two Generals Implementation	101
102	approach to further develop or use his starter code, should the MA government violate Federal or International law	102

103	again by illegally incarcerating him or torturing him at DMH. Plaintiff was subjected to 11 months of alleged torture	103
104	through deliberate misdiagnoses, lies, and malpractice at Tewksbury Hospital from October 2020 to September 2021,	104
105	and again in September 2024 (Case No. 2481CV03028, Shang, Bo vs. Madigan, Colleen), when Ms. Madigan	105
106	allegedly lied about Plaintiff violating pretrial conditions to facilitate 2 months of illegal torture at DMH. Plaintiff	106
107	invokes relevant international conventions, including the United Nations Convention Against Torture and Other	107
108	Cruel, Inhuman or Degrading Treatment or Punishment (UNCAT)—to which the United States is a signatory—as	108
109	well as the International Covenant on Civil and Political Rights (ICCPR). Plaintiff contends that such acts of torture or	109
110	illegal detainment violate these treaties and other fundamental human rights instruments.	110
111		111
112	2. JURISDICTION AND VENUE	112
113		113
114	2.1 Subject Matter Jurisdiction arises under:	114
115	• 28 U.S.C. § 1331 (federal question),	115
116	• 28 U.S.C. § 1332 (diversity),	116
117	• 28 U.S.C. § 1367 (supplemental jurisdiction).	117
118		118
119	The amount in controversy exceeds \$75,000 and involves both federal questions (e.g., alleged illegal taxation of	119
120	interstate commerce, possible violations of 18 U.S.C. §§ 1955, 1084, or the Sherman Act) and diversity between	120
121	Plaintiff and Defendants.	121
122		122
123	2.2 Venue is proper in this District under 28 U.S.C. § 1391 because:	123
124	 Twitch and Google (Alphabet) maintain significant business presences here; 	124
125	 Apple is headquartered in Cupertino, California; 	125
126	• A substantial part of the events or omissions giving rise to the claims occurred within this District.	126
127		127
128	3. THE PARTIES	128
129		129
130	3.1 Plaintiff:	130
131	• I, Bo Shang (Developer TeamID HUPDNC4PWJ), am a Massachusetts resident. I have used Twitch since	131
132	approximately 2017, have developed "PDFSage 1.0" for Apple's App Store, and rely on certain Google services. I	132
133	have a background in computer security, potential NSA recruitment, and a US Army GT score of 141.	133
134	• I further attest that I published open source SMBv2 execution hijacking starter code to serve as a deterrent against	134
135	further torture or illegal incarceration by Massachusetts authorities. In the event of further harm, I expect the security	135
136	community to finish or implement said code, following a "Two Generals Implementation" methodology, to highlight	136

137	vulnerabilities and malicious capabilities that could hold governments accountable.	137
138		138
139	3.2 Defendants:	139
140	• Twitch Interactive, Inc., a Delaware corporation headquartered in California.	140
141	 Apple Inc., a California corporation headquartered at One Apple Park Way, Cupertino, CA 95014. 	141
142	• Alphabet Inc. (Google), a Delaware corporation headquartered in Mountain View, CA.	142
143		143
144	4. FACTUAL BACKGROUND	144
145		145
146	4.1 Twitch: Unfair or Unlawful Practices	146
147	4.1.1 Plaintiff alleges Twitch fosters large-scale suspicious transactions (e.g., rumored \$685 million laundering on a	147
148	channel known as xQc) while imposing TOS that prohibit reverse engineering or deeper investigations into these	148
149	potential crimes.	149
150	4.1.2 Such TOS hamper legitimate user-led security or compliance research, as reverse engineering is integral to	150
151	analyzing data flows, payment structures, or suspicious patterns.	151
152	4.1.3 Because Twitch's conduct and TOS may facilitate or shield illegal gambling or money laundering, it may violate	152
153	18 U.S.C. §§ 1955 and 1084, as well as the "unlawful" prong of Cal. Bus. & Prof. Code § 17200.	153
154		154
155	4.2 Apple: "Design Spam" Rejection and Alleged 30% "Tax"	155
156	4.2.1 On or about January 7, 2025, Apple rejected Plaintiff's "PDFSage 1.0" for so-called "Design Spam," repeatedly	156
157	copy-pasting the same vague explanation without actionable detail.	157
158	4.2.2 Apple enforces a draconian reverse engineering clause in its Software License Agreement, restricting important	158
159	security and forensic investigations.	159
160	4.2.3 Apple also charges a 30% commission on App Store sales, which Plaintiff likens to a private, unauthorized "tax"	160
161	in violation of the U.S. Constitution's Article I, § 8 prerogatives and the Dormant Commerce Clause.	161
162		162
163	4.3 Google: Reverse Engineering Restrictions and Fee Structures	163
164	4.3.1 Google similarly maintains TOS that ban reverse engineering of its machine learning models, underlying code,	164
165	or related technologies, absent explicit permission.	165
166	4.3.2 Google charges various fees (such as 15-30% in the Google Play Store, or monetization fees on services) that,	166
167	when combined with other platform-based costs, may function similarly to Apple's allegedly unlawful "private tax."	167
168		168
169	4.4 Importance of Reverse Engineering (RE) to National Security and Public Welfare	169
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	171	4.4.1 Reverse Engineering (RE) is a critical capability that has historically safeguarded both national security and the	171
	172	public from cyber threats:	172
	173	• **Stuxnet**: A known cyber-weapon that targeted Iran's nuclear facilities. Cybersecurity researchers relied heavily	173
	174	on reverse engineering the Stuxnet worm to understand its functionality, mitigate its effects, and develop future	174
	175	safeguards.	175
	176	• **SMBv1 (EternalBlue/WannaCry)**: The WannaCry ransomware leveraged an SMBv1 vulnerability in Microsoft	176
	177	systems. Cybersecurity experts utilized reverse engineering to trace the exploit's mechanism, eventually mitigating	177
	178	the global outbreak.	178
	179	• **Salt Typhoon**: Alleged infiltration or large-scale exploit campaigns possibly requiring advanced RE to detect	179
	180	and remediate.	180
	181	• **Sega Enters. Ltd. v. Accolade, Inc.**, 977 F.2d 1510 (9th Cir. 1992): The Ninth Circuit recognized that reverse	181
	182	engineering can qualify as a fair use under U.S. copyright law.	182
	183	• **Sony Computer Entm't, Inc. v. Connectix Corp. **, 203 F.3d 596 (9th Cir. 2000): The court upheld that	183
	184	intermediate copying for the purpose of RE is fair use, fostering competition and technical progress.	184
	185	• **Lexmark Int'l, Inc. v. Static Control Components, Inc. **, 387 F.3d 522 (6th Cir. 2004): Confirming RE is often	185
	186	legitimate when geared toward interoperability or consumer choice.	186
	187		187
	188	4.4.2 Restricting reverse engineering through private EULAs or TOS disadvantages law enforcement, cyber	188
	189	defenders, and security researchers:	189
	190	 It prevents discovery of serious vulnerabilities like SMBv1 or iOS/macOS zero-days. 	190
	191	• It may hamper the U.S. from promptly detecting foreign infiltration campaigns akin to Stuxnet.	191
	192	• It disadvantages white-hat researchers and might push legitimate RE into a legal gray area, stifling innovation and	192
	193	national security readiness.	193
	194		194
	195	4.5 Disparity Between Chinese and U.S. National Security Laws	195
	196		196
	197	4.5.1 In the People's Republic of China, national security laws (e.g., PRC Cybersecurity Law effective 2017) impose	197
	198	certain obligations on both domestic and foreign tech companies, including Apple and Microsoft, potentially requiring	198
	199	code disclosures or facilitating deeper security reviews.	199
	200	4.5.2 In contrast, the U.S. lacks an overarching national security law that directly compels Apple, Google, or Twitch	200
	201	to allow or cooperate with robust reverse engineering by private individuals or certain government entities, apart from	201
	202	narrower law enforcement or intelligence carve-outs.	202
	203	4.5.3 Consequently, Apple may comply with more intrusive requirements under PRC law, yet simultaneously prohibit	203
	204	RE in the U.S. environment, placing domestic developers at a disadvantage. This discrepancy also undermines	204
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205	national cybersecurity readiness relative to foreign actors.	205
206		206
207	4.6 Plaintiff's Alleged Torture and the Necessity of Open Source Code as Deterrence	207
208		208
209	4.6.1 From October 2020 to September 2021, Plaintiff was allegedly subjected to 11 months of torturous treatment at	209
210	Tewksbury Hospital by the Massachusetts Department of Mental Health (DMH), involving deliberate misdiagnoses,	210
211	malpractice, and deception.	211
212	4.6.2 In September 2024 (Case No. 2481CV03028, Shang, Bo vs. Madigan, Colleen), Ms. Madigan purportedly lied	212
213	about Plaintiff violating pretrial conditions, leading to an additional 2-month illegal detention and torture at DMH.	213
214	4.6.3 Plaintiff contends this conduct violates both federal law and international treaties, including the United Nations	214
215	Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (UNCAT), to which	215
216	the U.S. is a signatory, as well as the International Covenant on Civil and Political Rights (ICCPR).	216
217	4.6.4 To deter future harm, Plaintiff open sourced high-level execution hijacking starter code for SMBv2, hoping that	217
218	if Massachusetts authorities illegally incarcerate or torture him again, the community will complete or deploy this	218
219	code ("Two Generals Implementation") to expose vulnerabilities and hold perpetrators accountable, thus forcing	219
220	adherence to the rule of law.	220
221		221
222	5. CAUSES OF ACTION	222
223		223
224	COUNT I: VIOLATIONS OF CAL. BUS. & PROF. CODE § 17200, et seq. (UCL)	224
225		225
226	5.1 Plaintiff incorporates all paragraphs above.	226
227		227
228	5.2 Unlawful Prong:	228
229	• Twitch's environment or Terms may facilitate or shield potential gambling and money laundering in violation of 18	229
230	U.S.C. §§ 1955, 1084.	230
231	• Apple's 30% "tax" or Google's substantial fees could violate the Dormant Commerce Clause, effectively operating	231
232	as an unauthorized private tax on interstate commerce.	232
233	• All Defendants' TOS banning reverse engineering may contravene established public policy and conflict with	233
234	recognized fair-use RE caselaw.	234
235		235
236	5.3 Unfair Prong:	236
237	• Apple's and Google's restrictions, combined with steep commissions, stifle competition, hamper developer	237
238	profitability, and block consumer choice.	238

239	• Twitch's TOS hamper investigations into financial crimes, harming the public.	239
240		240
241	5.4 Fraudulent Prong:	241
242	• Apple's repeated "Design Spam" rejections, lacking specifics, mislead developers.	242
243	• Twitch's portrayal as a safe streaming environment, while ignoring or enabling large-scale suspicious transactions,	243
244	misleads users.	244
245		245
246	5.5 Plaintiff requests injunctive relief, restitution, and disgorgement of ill-gotten gains, as well as any other relief	246
247	under Section 17200 and related statutes.	247
248		248
249	COUNT II: DECLARATORY JUDGMENT – UNCONSCIONABLE REVERSE ENGINEERING CLAUSES	249
250		250
251	5.6 Plaintiff incorporates all paragraphs above.	251
252		252
253	5.7 Apple's and Google's license agreements, along with Twitch's TOS, contain RE prohibitions that violate public	253
254	policy, hamper national security, and contravene well-established fair use jurisprudence (Sega, Sony v. Connectix,	254
255	Lexmark, etc.).	255
256		256
257	5.8 Plaintiff requests a judicial declaration that these RE clauses are void or unenforceable as against public policy,	257
258	and an injunction preventing enforcement against legitimate security or forensic research.	258
259		259
260	COUNT III: ILLEGAL TAXATION IN VIOLATION OF THE U.S. CONSTITUTION (APPLE & GOOGLE)	260
261		261
262	5.9 Plaintiff incorporates all paragraphs above.	262
263		263
264	5.10 Under Article I, § 8, only Congress may lay and collect taxes on interstate commerce. Apple's 30% commission	264
265	and analogous Google platform fees operate as a de facto tax, lacking legislative authority, burdening commerce, and	265
266	contradicting the Dormant Commerce Clause.	266
267		267
268	5.11 Plaintiff seeks a declaratory judgment that such private taxation is unconstitutional, plus injunctive relief	268
269	prohibiting Defendants from continuing to impose it in the manner alleged.	269
270		270
271	COUNT IV: GROSS NEGLIGENCE – APPLE'S "DESIGN SPAM" REJECTION	271
272		272
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273	5.12 Plaintiff incorporates all paragraphs above.	273
274		274
275	5.13 Apple's repeated vague or non-responsive rejections of "PDFSage 1.0" as "Design Spam" constitute gross	275
276	negligence. Apple owed a duty of care to me as a paying developer, and I suffered lost opportunities, costs, and	276
277	reputational harm as a direct result.	277
278		278
279	5.14 Plaintiff seeks compensatory damages for these negligent acts and any other relief deemed just by the Court.	279
280		280
281	COUNT V: GROSS NEGLIGENCE / EXTREMELY POOR PASTING "CUSTOMER SERVICE" (APPLE)	281
282		282
283	5.15 Plaintiff incorporates all paragraphs above.	283
284		284
285	5.16 Apple's thrice-pasted, unhelpful, and contradictory rejections confirm a pattern of extremely poor customer	285
286	service, falling below the standard of care for a trillion-dollar corporation that depends on developer participation for	286
287	revenue.	287
288		288
289	5.17 Plaintiff seeks damages for the harm caused and any additional relief, including punitive damages, permissible	289
290	under law.	290
291		291
292	6. PRAYER FOR RELIEF	292
293		293
294	WHEREFORE, Plaintiff respectfully prays for judgment against Defendants as follows:	294
295		295
296	1. For an order granting this motion to amend and join Apple Inc. (and to maintain claims against Google and	296
297	Twitch);	297
298		298
299	2. For a declaratory judgment that Defendants' reverse engineering prohibitions are unconscionable, unenforceable,	299
300	and contrary to established public policy favoring security research and fair competition;	300
301		301
302	3. For injunctive relief enjoining:	302
303	(a) Apple, Google, and Twitch from enforcing their RE clauses in a manner that prevents lawful investigation or	303
304	stifles security research;	304
305	(b) Apple from arbitrarily rejecting developer submissions under the guise of "Design Spam" without providing	305
306	specific, remediable grounds;	306
		-

307	(a) Apple and Google from imposing private "toyog" on interestate commerce is 200/ commissions that effectively	307
	(c) Apple and Google from imposing private "taxes" on interstate commerce, i.e., 30% commissions that effectively	
308	exceed ordinary business practices and amount to unauthorized taxation.	308
309		309
310	4. For restitution, disgorgement, or damages (including compensatory and punitive damages as allowed by law)	310
311	arising from Defendants' conduct, in an amount proven at trial;	311
312	5 Francis of the state of the Heavy American Conference of the state o	312
313	5. For costs of suit, attorneys' fees (should counsel appear), and any further relief that this Court deems just and	313
314	proper;	314
315		315
316	6. That this Court take judicial notice of and condemn the alleged torture and human rights violations perpetrated	316
317	against Plaintiff by the Massachusetts DMH, as these actions violate the UN Convention Against Torture and other	317
318	human rights treaties to which the United States is a signatory, and that the open source SMBv2 code stands as a	318
319	lawful deterrent to ensure fundamental rights.	319
320		320
321	7. DEMAND FOR JURY TRIAL	321
322		322
323	Plaintiff hereby demands a trial by jury on all causes of action so triable.	323
324		324
325	Respectfully submitted,	325
326	Detail: January 12, 2025	326
327	Dated: January 12, 2025	327
328		328
329 330		329
331	Signature:	330
332	BO SHANG (Pro Se)	331 332
333	10 McCafferty Way Burlington, MA 01803	333
334	Phone: 781-999-4101 or 617-618-8279	334
	Email: bo@pdfsage.org boshangsoftware@proton.me	
335 336	Email: 00@pursage.org vosnangsortware@proton.me	335
337		336
	EVHIDITS (INCODDOD ATED DV DECEDENCE)	337
338	EXHIBITS (INCORPORATED BY REFERENCE)	338
339	EVIDIT 1. April 2. Ap	339
340	• EXHIBIT 1: Apple's repeated vague "Design Spam" notices, copies of the same text.	340

341	• EXHIBIT 2: PDFSage 1.0 submission details (Jan 8, 2025).	34
342	• EXHIBIT 3: Evidence of Apple's 30% commission and inability to articulate legitimate design concerns.	342
343	• EXHIBIT 4: Twitch references to xQc channel's alleged \$685M suspicious transactions and the effect of TOS on	343
344	investigating these matters.	344
345	• EXHIBIT 5: Documentation on Google's Terms of Service and usage fees, specifically referencing RE restrictions.	34:
346	• EXHIBIT 6: References to stuxnet, SMBv1/EternalBlue, salt typhoon infiltration, Chinese cybersecurity laws	340
347	requiring certain code disclosures, contrasted with U.S. policy.	34′
348	• EXHIBIT 7: Documentation related to Plaintiff's alleged torture at Tewksbury Hospital (Oct 2020 - Sep 2021) and	348
349	DMH incarceration (Sep - Nov 2024), referencing UNCAT and ICCPR.	349
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