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PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Groupon, Inc.	02/26/2024

RECEIVING PARTY DATA

Company Name:	Bytedance Inc.
Street Address:	251 Little Falls Drive
City:	Wilmington
State/Country:	DELAWARE
Postal Code:	19808

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17814069

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Total Attachments: 160

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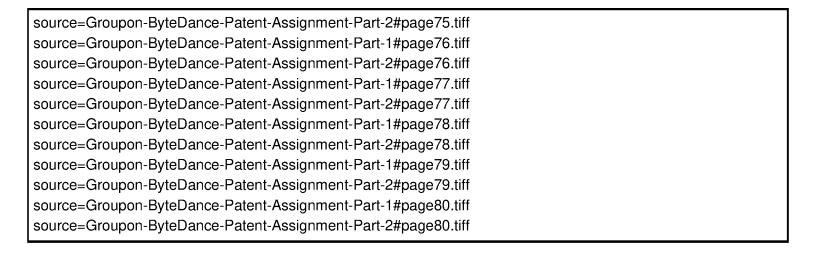
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Appendix A: Patent List

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15847442	11816653	GPS DETERMINED LOCATION BASED ACCESS TO LINKED INFORMATION AND DELIVERY THEREOF	Granted Active
US	15880987	20190012661	Promotion Redemption And Payment Gateway	Abandoned Inactive
US	16946887	20210021679	CIRCLE MODEL POWERED SUGGESTIONS AND ACTIVITIES	Abandoned Inactive
US	17127492	11734719	PULL-TYPE SEARCHING SYSTEM	Granted Active
US	17196465	11727445	PREDICTIVE RECOMMENDATION SYSTEM USING PRICE BOOSTING	Granted Active
US	17247548	11734754	SYSTEM AND METHOD FOR GENERATING GEOGRAPHIC ZONE INFORMATION FOR CONSUMERS	Granted Active
US	17306843	11694252	METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR GROUP GIFTING IN A RANDOMIZED FORMAT	Granted Active
US	17308670	20210326921	PROMOTION SYSTEM FOR DETERMINING AND CORRECTING FOR INSUFFICIENCY OF PROMOTION DATA	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17409169	20220086594	APPARATUS AND METHOD FOR DISTANCE-BASED OPTION DATA OBJECT FILTERING AND MODIFICATION	Abandoned Inactive
US	17443284	11694235	METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR PROVIDING A MODULAR FRAMEWORK OF ASYNCHRONOUS AND PARALLEL PROCESSES	Granted Active
US	17447452	11687962	INCENTIVIZING SHARING IN SOCIAL NETWORKS	Granted Active
US	17448627	20220084069	METHOD, APPARATUS, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR SELECTING AN IMAGE ASSOCIATED WITH A PROMOTION	Abandoned Inactive
US	17451695	11710076	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR MACHINE LEARNING MODEL LIFECYCLE MANAGEMENT	Granted Active
US	17455057	20220270154	SYSTEM AND METHOD FOR GENERATING PURCHASE RECOMMENDATION S BASED ON	Abandoned Inactive

PATENT

Country	Application No.	Patent No./ Publication No.	Title	Status
			GEOGRAPHIC ZONE INFORMATION	
US	17455058	11836781	SYSTEM AND METHOD FOR GENERATING PURCHASE RECOMMENDATION S BASED ON GEOGRAPHIC ZONE INFORMATION	Granted Active
US	17470693	11734709	Booking Availability Engine	Granted Active
US	17517306	20220164823	PROMOTION OFFERING SYSTEM ANALYZING COLLECTIONS OF PROMOTIONS	Abandoned Inactive
US	17563847	11756059	DISCOVERY OF NEW BUSINESS OPENINGS USING WEB CONTENT ANALYSIS	Granted Active
US	17564804	11741111	MACHINE LEARNING SYSTEMS ARCHITECTURES FOR RANKING	Granted Active
US	17647132	20220311748	OBFUSCATION OF EMAIL ADDRESSES	Abandoned Inactive
US	17647867	11694225	Ad Targeting & Display Optimization Based on Social and Community Data	Granted Active
US	17649981	20220222710	METHODS AND SYSTEMS FOR MANAGING TRANSMISSION OF ELECTRONIC MARKETING COMMUNICATIONS	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17652021	11720932	COLLABORATIVE EDITING SERVICE	Granted Active
US	17661191	11784901	METHOD, APPARATUS AND COMPUTER PROGRAM PRODUCT FOR IMPROVING DYNAMIC RETRY OF RESOURCE SERVICE	Granted Active
US	17734547	11727439	GENERATING OPTIMIZED IN- CHANNEL AND CROSS-CHANNEL PROMOTION RECOMMENDATION S USING FREE SHIPPING QUALIFIER	Granted Active
US	17805373	20220407795	CENTRALIZED, SCALABLE, RESOURCE MONITORING SYSTEM	Abandoned Inactive
US	17809596	11741493	WEARABLE DEVICE THAT IS AUTOMATICALLY CONFIGURABLE BETWEEN WEARER FACING AND REDEMPTION INTERFACES	Granted Active
US	17842637	11729257	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR BALANCING NETWORK RESOURCE DEMAND	Granted Active
US	11307262	7788188	System for providing a service to venues where people aggregate	Granted Active

PATENT

Country	Application No.	Patent No./ Publication No.	Title	Status
US	11404102	8311845	Pay-for-visit advertising based on visits to physical locations	Granted Active
US	11688761	8315905	Location based advertising systems	Granted Active
US	11697617	7840224	Facilitating user interactions based on proximity	Granted Active
US	12082836	7953548	Location-based information determination	Granted Active
US	12119465	9646078	Sentiment extraction from consumer reviews for providing product recommendations	Granted Active
US	12150565	8135505	Determining locations of interest based on user visits	Granted Active
US	12161554	7856360	System for providing a service to venues where people aggregate	Granted Active
US	12169599	9235848	Implicitly associating metadata using user behavior	Granted Active
US	12182592	8103519	System for marketing campaign specification and secure digital coupon redemption	Granted Active
US	12277237	8499247	Ranking interactions between users on the internet	Granted Active
US	12393795	10949485	Generating and presenting targeted advertisements including representations of subject individuals	Granted Active
US	12396467	9235842	Method for providing information to contacts without being given contact data	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	12580176	11257112	Ad targeting and display optimization based on social and community data	Granted Active
US	12592947	8301495	System and methods for discount retailing	Granted Active
US	12776028	8355948	System and methods for discount retailing	Granted Active
US	12906876	9275407	Systems and methods to implement point of sale (POS) terminals, process orders and manage order fulfillment	Granted Active
US	12950709	8150439	Facilitating user interactions based on proximity	Granted Active
US	13050771	8650072	System and methods for providing location based discount retailing	Granted Active
US	13176883	10521813	System and method for incentives	Granted Active
US	13219344	9679305	Embedded storefront	Granted Active
US	13329307	8583447	System for marketing campaign specification and secure digital coupon redemption	Granted Active
US	13354947	10102591	Systems and methods to implement point of sale (POS) terminals, process orders and manage order fulfillment	Granted Active
US	13363239	9614921	Facilitating user interactions based on proximity	Granted Active
US	13385103	8756011	Determining locations of interest based on user visits	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13405664	10657569	Merchant deal creation and redemption system	Granted Active
US	13418208	9100454	Method and system for enabling the creation and maintenance of proximity-related user groups	Granted Active
US	13436461	9142081	Dynamic awarding of prizes in chance-based contests	Granted Active
US	13444678	9384211	System, method, and computer program product for automated discovery, curation and editing of online local content	Granted Active
US	13444691	9563644	System, method, and computer program product for generation of local content corpus	Granted Active
us	13452469	9292880	Circle model powered suggestions and activities	Granted Active
US	13460745	11062348	Sales enhancement system	Granted Active
US	13467168	10607218	Facilitating end-to-end encryption for E-commerce	Granted Active
US	13470338	9489352	System and method for providing content to users based on interactions by similar other users	Granted Active
US	13481407	10580022	Computing early adopters and potential influencers using transactional data and network analysis	Granted Active
US	13573783	9508082	Offline location-based consumer metrics using online signals	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13612594	10380658	Pay-for-visit advertising based on visits to physical locations	Granted Active
US	13616565	11023914	System and methods for discount retailing	Granted Active
US	13617515	8903733	System and methods for discount retailing	Granted Active
US	13657728	9665898	Executing multiple transactions using trigger inputs	Granted Active
US	13744141	9223774	Email suggestor system	Granted Active
US	13749272	10304093	Method, apparatus, and computer readable medium for providing a self-service interface	Granted Active
US	13751035	9105039	System and method for providing mobile alerts to members of a social network	Granted Active
US	13752088	10891641	Transaction processing system	Granted Active
US	13756145	10929881	Pre-feature promotion system	Granted Active
US	13773184	9208063	Method for testing mobile application and associated apparatus and system	Granted Active
US	13783503	10096056	Method, apparatus, and computer readable medium for providing a digital unwrapping trigger	Granted Active
US	13786828	11328367	Method, apparatus, and computer readable medium for transferring of promotions	Granted Active
US	13790763	9235652	Optimizing a data integration process	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13794529	9576286	Consumer device based point-of-sale	Granted Active
US	13797264	10482511	Employee profile for customer assignment, analytics and payments	Granted Active
US	13797570	9122710	Discovery of new business openings using web content analysis	Granted Active
US	13800536	9177031	Method, apparatus, and computer program product for ranking content channels	Granted Active
US	13801610	10235692	Consumer presence based deal offers	Granted Active
US	13803445	10733621	Method, apparatus, and computer program product for sales pipeline automation	Granted Active
US	13804403	9947021	Method, apparatus, and computer product for identifying a service need via a promotional system	Granted Active
US	13805000	10915843	Method, apparatus, and computer program product for identification of supply sources	Granted Active
US	13826333	9947022	Method, apparatus, and computer program product for forecasting demand	Granted Active
US	13826464	10255567	Method, apparatus, and computer program product for lead assignment	Granted Active
US	13826757	9330357	Method, apparatus, and computer program product for determining a provider return rate	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13826866	10346887	Method, apparatus, and computer program product for calculating a provider quality score	Granted Active
US	13829581	10929889	Promotion offering system	Granted Active
US	13832804	10235696	Method for determining provider parameters including a provider margin	Granted Active
US	13833548	10664861	Generating promotion offers and providing analytics data	Granted Active
US	13835276	9226110	Method and system for determining location of mobile device	Granted Active
US	13838415	11195201	Promotion offering system analyzing collections of promotions	Granted Active
US	13838452	10198742	Inbox management system	Granted Active
US	13838711	10325284	Cadence management system for consumer promotions	Granted Active
US	13838874	10430824	Reimpression promotion system	Granted Active
US	13838918	10115129	Deal allocation platform	Granted Active
US	13839036	10360580	Promotion system for determining and correcting for insufficiency of promotion data	Granted Active
US	13839102	11127041	Customization of message delivery time based on consumer behavior	Granted Active
US	13839226	10304091	Deal generation using point-of-sale systems and related methods	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13839360	10346870	Dynamic promotion analytics	Granted Active
US	13839414	10147130	Online ordering for inshop service	Granted Active
US	13839499	10535076	Deal program life cycle	Granted Active
US	13841247	9002375	Presence detection based on crowd surfing signal strength	Granted Active
US	13841347	10853836	Unified payment and return on investment system	Granted Active
US	13841433	10943253	Consumer cross- category deal diversity	Granted Active
US	13841854	10614480	Method and apparatus for return on investment impact reporting	Granted Active
US	13842379	10395276	Pull-type searching system	Granted Active
US	13842449	9779424	Generic message injection system	Granted Active
US	13842726	10373184	Facilitating consumer payments and redemptions of deal offers	Granted Active
US	13842813	10373186	Facilitating consumer payments and redemptions of deal offers	Granted Active
US	13861874	9304663	Centralized, scalable, resource monitoring system	Granted Active
US	13875019	9852409	Consumer device based point-of-sale	Granted Active
US	13893044	9330167	Method, apparatus, and computer program product for classification and tagging of textual data	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13903678	10628880	Managing merchant communications	Granted Active
US	13908802	10044650	Dynamic customized electronic message content generation	Granted Active
US	13913887	10192243	Method and apparatus for determining promotion pricing parameters	Granted Active
us	13918650	9978084	Configurable relevance service test platform	Granted Active
US	13919944	10776826	System for providing a service to venues where people perform transactions	Granted Active
US	13922750	10664876	Method and apparatus for promotion template generation	Granted Active
US	13926513	10275786	Customized deal generation graphic user interface for point-of- sale device	Granted Active
US	13928011	10417667	Method and apparatus for creating web content and identifying advertisements for users creating and viewing content	Granted Active
US	13929253	10255620	Fine print builder	Granted Active
US	13929977	10325285	Predictive recommendation system	Granted Active
US	13930519	10387902	Method and apparatus for generating an electronic communication	Granted Active
US	13930527	10423977	Method and apparatus for generating an electronic communication	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13930532	10373210	Method and apparatus for generating an electronic communication	Granted Active
US	13930833	10032182	Systems and methods for providing promotion sharing among consumers	Granted Active
US	13932224	8898579	Ranking interactions between users on the internet	Granted Active
US	13966187	10482487	Incentivizing sharing in social networks	Granted Active
US	13969008	9589184	Method, apparatus, and computer program product for classification of documents	Granted Active
US	13991807	11295394	Method and system for credit card holder identification	Granted Active
US	14038610	10475063	Automated deal guide optimization	Granted Active
US	14038629	10475083	Automated deal guide structure identification	Granted Active
US	14038641	10229432	Automated deal guide user interface	Granted Active
US	14038644	9411905	Multi-term query subsumption for document classification	Granted Active
US	14038661	9465857	Dynamic clustering for streaming data	Granted Active
US	14038949	10304077	Method, apparatus, and computer program product for providing real time incentives	Granted Active
US	14039473	9563900	Method, apparatus, and computer program product for consumer tracking	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	14039697	10825042	Systems and methods for providing optimized leading messages	Granted Active
US	14039842	9996859	Method, apparatus, and computer readable medium for providing a self-service interface	Granted Active
US	14040331	9928493	Systems and methods for providing consumer facing point-of-sale interfaces	Granted Active
US	14041890	10346885	Automated approval of generated promotions	Granted Active
US	14052542	10096039	System for marketing campaign specification and secure digital coupon redemption	Granted Active
US	14088247	9600776	Automated adaptive data analysis using dynamic data quality assessment	Granted Active
US	14088248	9390112	Automated dynamic data quality assessment	Granted Active
US	14103256	10929876	Method, apparatus, and computer program product for ascertaining a demand of promotions	Granted Active
US	14104434	10360159	System, method, apparatus, and computer program product for providing a cache mechanism	Granted Active
US	14106203	10147104	Method, apparatus, and computer program product for providing a search feedback system	Granted Active
US	14132850	9135235	Exporter	Granted Active
US	14189029	10783554	Generation of promotion in an augmented reality	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	14189983	9916579	Promotion redemption and payment gateway	Granted Active
US	14193646	10832264	System, method, and computer program product for calculating an accepted value for a promotion	Granted Active
US	14207399	11042904	Method and system for detecting application programs on mobile computing device	Granted Active
US	14207427	11010793	Method and system for determining user profile data for promotion and marketing service using mobile application program information	Granted Active
US	14207444	10269043	Method and system for distribution of application program for promotion and marketing service	Granted Active
US	14207450	10891651	Method and system for launching application programs using promotion impressions	Granted Active
US	14207456	10846749	Method and system for offering promotion impressions using application programs	Granted Active
US	14207464	10937062	Method and system for facilitating download of application programs on mobile computing device	Granted Active
US	14211840	10223709	System for providing impressions based on consumer preferences for future promotions	Granted Active
US	14219349	10984455	Method and apparatus for generating an	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			electronic communication	
US	14222369	10902465	Systems, apparatus, and methods of providing prepurchase promotions	Granted Active
US	14222380	10733628	Systems, apparatus, and methods of providing promotions based on consumer request	Granted Active
US	14230970	10001902	Learning user interface	Granted Active
US	14230980	9582145	Learning user interface	Granted Active
US	14230996	9665240	Learning user interface having dynamic icons with a first and second visual bias	Granted Active
US	14231015	9804737	Learning user interface	Granted Active
US	14231222	10210547	Predictive recommendation system using contextual relevance	Granted Active
US	14231362	10210548	Predictive recommendation system using absolute relevance	Granted Active
US	14231385	10210536	Predictive recommendation system using price boosting	Granted Active
US	14231532	11263646	Systems, apparatus, and methods of programmatically determining unique contacts	Granted Active
US	14248676	11348139	Communication beacon based promotions for mobile devices	Granted Active
US	14264565	11288711	Collaborative editing service	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14269765	10546323	Determining locations of interest based on user visits	Granted Active
US	14279933	9756000	Obfuscation of email addresses	Granted Active
US	14283151	9953493	Visitor detection unit and identification system	Granted Active
US	14298291	10949894	Method, apparatus, and computer program product for facilitating dynamic pricing	Granted Active
US	14301034	11263658	Non-promotion content determination system	Granted Active
US	14311098	11037129	Consumer device presence-based transaction session	Granted Active
US	14312588	10552868	Seamless promotion redemption	Granted Active
US	14312591	10228829	Interactive personalized graphical feedback overlay	Granted Active
US	14316228	9947024	Method, apparatus, and computer program product for classifying user search data	Granted Active
US	14316245	10032180	Method, apparatus, and computer program product for forecasting demand using real time demand	Granted Active
US	14316253	9940635	Method, apparatus, and computer program product for calculating a supply based on travel propensity	Granted Active
US	14316264	10242373	Method, apparatus, and computer program product for setting a benchmark conversion rate	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14316270	10108974	Method, apparatus, and computer program product for providing a dashboard	Granted Active
US	14316298	10269041	Method, apparatus, system, and computer program product for selecting an image associated with a promotion	Granted Active
US	14316970	11144948	Booking availability engine	Granted Active
US	14316981	11144966	Merchant booking availability engine	Granted Active
US	14316994	10902452	Consumer booking availability engine	Granted Active
US	14453179	9684910	Method and apparatus for generating an electronic communication	Granted Active
US	14453911	10546316	Automated deal guide optimization	Granted Active
US	14454673	10643243	Communication beacon based promotions for mobile devices	Granted Active
US	14454675	10163089	Systems and methods for providing consumer facing point-of-sale interfaces	Granted Active
US	14459256	11354695	Configuring promotions for local pickup of goods	Granted Active
US	14473918	11328324	Systems and methods for providing promotions based on search queries	Granted Active
US	14473933	11030648	Systems and methods for providing diversified promotional messages	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14479267	10163129	Method and apparatus for providing promotion recommendations	Granted Active
US	14494053	9619817	Method, apparatus, and computer program product for autoreplenishing an inventory of promotions	Granted Active
US	14495199	11222318	Contractor point of sale system	Granted Active
US	14495747	10102562	Systems and methods for providing multiple items to consumers	Granted Active
US	14495750	10438188	Systems and methods for providing shared promotion redemptions	Granted Active
US	14495754	10628815	Systems and methods for programmatically grouping consumers	Granted Active
US	14495790	10540686	Systems and methods for providing streamlined multiple item transactions	Granted Active
US	14532269	11568442	Unlocking editorial content	Granted Active
US	14539937	11232477	Sourcing goods based on pre-feature analytics	Granted Active
US	14551843	9323858	Ranking interactions between users on the internet	Granted Active
US	14557042	11386465	Method and apparatus for providing promotion vouchers	Granted Active
US	14565380	10922719	Systems and methods for providing group promotions	Granted Active
US	14571013	10937059	Systems, apparatus, and methods for providing local promotions	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14571018	10956937	Systems, apparatus, and methods for providing promotion newsfeeds	Granted Active
US	14571027	11017433	Systems, apparatus, and methods for providing merchant-defined local promotions	Granted Active
US	14573299	10417659	Method, apparatus, and computer program product for automated approval of a promotion structure	Granted Active
US	14574343	11113725	Method and system for recommending promotions to consumers	Granted Active
us	14575396	9141593	System, apparatus, and method for page composition	Granted Active
US	14577320	10832290	Method and system for providing electronic marketing communications for a promotion and marketing service	Granted Active
US	14578200	10657457	Automatic selection of high quality training data using an adaptive oracle-trained learning framework	Granted Active
US	14578205	10614373	Processing dynamic data within an adaptive oracle-trained learning system using curated training data for incremental re-training of a predictive model	Granted Active
US	14578210	11210604	Processing dynamic data within an adaptive oracle-trained learning system using dynamic	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			data set distribution optimization	
US	14579964	10832281	Systems, apparatus, and methods for providing promotions based on consumer interactions	Granted Active
US	14588196	10657177	Method and apparatus for implementing a search index generator	Granted Active
US	14622002	10558991	Method and apparatus for payment, return on investment, and impact reporting	Granted Active
US	14626363	10115105	Method and system for facilitating consumer interactions for performing purchase commands	Granted Active
US	14626370	10628027	Method and system for a predefined suite of consumer interactions for initiating execution of commands	Granted Active
US	14626373	10528250	Method and system for facilitating consumer interactions with promotions	Granted Active
US	14626381	10809911	Method and system for defining consumer interactions for initiating execution of commands	Granted Active
US	14626384	11231849	Method and system for use of biometric information associated with consumer interactions	Granted Active
US	14626395	10162513	Method and system for adjusting item relevance based on consumer interactions	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14628995	11068936	Method, apparatus, and computer program product for searching for promotions	Granted Active
US	14629788	10650436	Method, apparatus, and computer readable medium for group gifting in a randomized format	Granted Active
US	14638703	9154916	Presence detection based on crowd surfing signal strength	Granted Active
US	14671878	10558925	Forecasting demand using hierarchical temporal memory	Granted Active
US	14693712	11488205	Generating in-channel and cross-channel promotion recommendations using promotion cross-sell	Granted Active
US	14693721	10699299	Generating optimized in-channel and cross-channel promotion recommendations using free shipping qualifier	Granted Active
ÜS	14709296	10497025	Real-time predictive recommendation system using per-set optimization	Granted Active
US	14727591	9355114	Graph-based compression of data records	Granted Active
US	14727852	9317566	Method and system for programmatic analysis of consumer reviews	Granted Active
US	14748983	9380120	Method and system for enabling the creation and maintenance of proximity-related user groups	Granted Active
US	14749348	10373204	Mobile visual locator	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14752311	11250450	Method and system for programmatic generation of survey queries	Granted Active
US	14755585	10102308	Method and apparatus for identifying related records	Granted Active
US	14788474	11080754	Promotional system interaction tracking	Granted Active
US	14788479	10438229	Systems and methods for providing dimensional promotional offers	Granted Active
US	14788488	10410225	Systems, apparatus, and methods of programmatically determining unique contacts based on crowdsourced error correction	Granted Active
US	14794211	9846988	Dynamic awarding of prizes in chance-based contests	Granted Active
US	14803993	9824371	Verification of redemption of an electronic offer	Granted Active
US	14808918	9773252	Discovery of new business openings using web content analysis	Granted Active
US	14809777	10241981	System, apparatus, and method for page composition	Granted Active
US	14811521	10878017	System and method for programmatic generation of attribute descriptors	Granted Active
US	14814154	10318984	Predictive recommendation system using tiered feature data	Granted Active
US	14817005	10650326	Dynamically optimizing a data set distribution	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14818915	10796321	Method and system for generating purchase recommendations based on purchase category associations	Granted Active
US	14820722	9646321	Exporter	Granted Active
US	14823449	10244025	Method, apparatus, and computer program product for controlling content distribution	Granted Active
US	14824912	10572925	Universal relevance service framework	Granted Active
US	14824922	11216843	Ranked relevance results using multi- feature scoring returned from a universal relevance service framework	Granted Active
US	14824929	10459927	Enforcing diversity in ranked relevance results returned from a universal relevance service framework	Granted Active
US	14832684	10157392	Computer system and computer-executed method for inventory valuation	Granted Active
US	14836356	11562420	Method and apparatus for electronic transactions based on a reply message	Granted Active
US	14839490	11403656	Method and apparatus for identifying trending promotions	Granted Active
us	14846288	9693193	Presence detection based on crowd surfing signal strength	Granted Active
US	14858468	11328327	Method and apparatus for automated merchant acquisition	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	14865181	11379859	Method and apparatus for providing automated market analysis testing	Granted Active
US	14865899	11113726	Methods, apparatuses, and computer program products for providing a platform for negotiation and provision of promotions	Granted Active
US	14865907	10657570	Method, apparatus, and computer program product for providing a user platform for a real-time marketplace	Granted Active
US	14867640	11341549	Apparatus, method, and computer program product for providing group rewards	Granted Active
US	14869536	10713702	System and method for generating purchase recommendations based on geographic zone information	Granted Active
US	14869548	10922712	System and method for generating geographic zone information for consumers	Granted Active
US	14874870	9710521	Method, apparatus, and computer program product for ranking content channels	Granted Active
US	14881723	10546269	Method and apparatus for managing item inventories	Granted Active
US	14918362	10339468	Curating training data for incremental re- training of a predictive model	Granted Active
US	14919111	10977667	Method and system for programmatic analysis of consumer sentiment	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			with regard to attribute descriptors	
US	14924173	10762535	Client-based deal filtering and display	Granted Active
US	14935857	10984390	Method, apparatus, and computer program product for scheduling appointments with deal offers	Granted Active
US	14944933	11157391	Method for testing mobile application and associated apparatus and system	Granted Active
US	14949750	9628957	Method and system for determining location of mobile device	Granted Active
US	14958423	9606982	Email suggestor system	Granted Active
US	14959401	9953342	Implicitly associating metadata using user behavior	Granted Active
US	14968056	10607169	Method, apparatus, and computer program product for programmatically updating data for communication to a social network system	Granted Active
US	14976664	10116612	Electronically referring a contact without divulging contact data	Granted Active
US	14980656	11756080	Prescient And Adaptive Point-Of-Sale Systems	Granted Active
US	14980667	9699610	Location based discovery of real-time merchant device activity	Granted Active
US	14980678	10762534	Motion data based consumer interfaces	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	14980689	10592882	Prescient and adaptive point-of-sale systems	Granted Active
US	14983671	11295343	System and apparatus for self-forming ad-hoc group promotions	Granted Active
US	14983838	11276082	Methods and systems for managing transmission of electronic marketing communications	Granted Active
us	15016913	11488129	Systems and methods to implement point of sale (POS) terminals, process orders and manage order fulfillment	Granted Active
US	15018011	10949874	Method, apparatus, and computer program product for performing a rules-based determination on the suppression of an electronic presentation of an item	Granted Active
US	15045642	10749975	Circle model powered suggestions and activities	Granted Active
US	15051051	10387470	Method, apparatus, and computer program product for classification and tagging of textual data	Granted Active
US	15051165	10558922	Method, apparatus, and computer program product for determining a provider return rate	Granted Active
ÚS	15058535	9692680	Centralized, scalable, resource monitoring system	Granted Active
us	15073486	9741058	Method and system for programmatic analysis of consumer reviews	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15074152	11132343	Automatic entity resolution data cleaning	Granted Active
US	15083422	10438216	Apparatus and method for enhanced message targeting	Granted Active
US	15083441	10783537	Apparatus and method for enhanced message targeting	Granted Active
US	15144371	11157970	Apparatus, method, and computer program product for providing synchronous delivery of active media and electronic marketing communications	Granted Active
US	15144977	9619823	Graph-based compression of data records	Granted Active
US	15160142	10535075	Rewards program	Granted Active
US	15161495	9703823	Automated dynamic data quality assessment	Granted Active
US	15167108	11170388	Methods and systems for programmatic control of transmitted electronic content	Granted Active
US	15167178	11386443	Methods and systems for programmatic control of transmitted electronic content	Granted Active
US	15167604	11016963	Mobile search	Granted Active
US	15168978	10324996	System, method, and computer program product for automated discovery, curation and editing of online local content	Granted Active
US	15168983	9769611	Method and system for enabling the creation	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			and maintenance of temporary user groups	
US	15172032	10325253	Peer-to-peer payment processing	Granted Active
US	15174156	10977678	Apparatus and method for utilizing proximity density mapping to assist relevance determinations	Granted Active
US	15174164	10521815	Apparatus and method for utilizing immediate gratification promotions	Granted Active
US	15174173	10929867	Apparatus and method for utilizing immediate gratification promotions	Granted Active
US	15190078	10666454	Apparatus, system, and method for providing simultaneous delivery of output communications	Granted Active
US	15191344	10034129	Mobile proximity based messages	Granted Active
US	15191348	11348141	Mobile chat application integration with promotional systems	Granted Active
US	15192366	11182810	Method, apparatus, and computer program product for merchant classification	Granted Active
US	15192439	10733157	Hybrid data integration platform	Granted Active
US	15197202	10126837	Wearable device that is automatically configurable between wearer facing and redemption interfaces	Granted Active
US	15197931	10416875	Method, apparatus, and computer program product for facilitating the playback of interface events	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15198461	9652527	Multi-term query subsumption for document classification	Granted Active
US	15199035	10672020	Method, apparatus, and computer program product for offering and processing promotions	Granted Active
US	15226827	11120466	Deal scoring system and method	Granted Active
US	15228263	11334913	Method, apparatus, and computer program product for facilitating the activation of promotions using short codes	Granted Active
US	15253665	11188940	Method, apparatus, and computer program for predicting consumer behavior	Granted Active
US	15259630	9852212	Dynamic clustering for streaming data	Granted Active
US	15280167	10206079	System and method for notification transmission and confirmation management	Granted Active
US	15280208	10778598	System and method for object-response asset authorization and pairing	Granted Active
US	15280220	11403133	System and method for managing request-to-task translation and sequencing	Granted Active
US	15280237	10268533	System and method for error detection and monitoring of object-asset pairs	Granted Active
US	15280246	10409792	Apparatus and method for data object generation and control	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	15280580	10810642	Method, manufacture, and apparatus for facilitating on-demand home and auto services	Granted Active
US	15280738	10740793	Method, apparatus, and computer program product for predicting web browsing behaviors of consumers	Granted Active
US	15281024	10373383	Interactive virtual reality system	Granted Active
US	15281517	10229314	Optical receipt processing	Granted Active
US	15281656	11449906	Dynamic augmenting relevance rankings using data from external ratings sources	Granted Active
US	15281779	10871895	Mobile device merchant availability interface	Granted Active
US	15287413	10699332	Method and apparatus for facilitating meta search proxy bidding	Granted Active
US	15288540	10114803	System and method for providing content to users based on interactions by similar other users	Granted Active
US	15332921	10049383	Offline location-based consumer metrics using online signals	Granted Active
US	15387858	10282053	Learning user interface	Granted Active
US	15389749	10068240	Method, apparatus, and computer program product for consumer tracking	Granted Active
US	15393721	11442945	Dynamic freshness for relevance rankings	Granted Active
US	15395303	11425074	Methods, apparatuses, and systems for	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			providing an event evaluation framework	
US	15397114	10824688	System, method, and computer program product for generation of local content corpus	Granted Active
US	15427908	10262277	Automated adaptive data analysis using dynamic data quality assessment	Granted Active
US	15439985	10219119	Facilitating user interactions based on proximity	Granted Active
US	15439993	10410233	Method, apparatus, and computer program product for autoreplenishing an inventory of promotions	Granted Active
US	15443550	10339375	Method, apparatus, and computer program product for classification of documents	Granted Active
US	15443556	10146766	Email suggestor system	Granted Active
US	15449687	10062089	Graph-based compression of data records	Granted Active
US	15452193	10034139	Method and system for determining location of mobile device	Granted Active
US	15473091	10909120	Configurable and incremental database migration framework for heterogeneous databases	Granted Active
US	15476792	10687167	Methods and systems for detecting aggregation events	Granted Active
US	15482179	10726055	Multi-term query subsumption for document classification	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15486188	10467671	Facilitating online transactions	Granted Active
US	15489057	10796334	Exporter	Granted Active
US	15496224	11003309	Incrementing a visual bias triggered by the selection of a dynamic icon via a learning user interface	Granted Active
US	15589246	10685371	Embedded storefront	Granted Active
US	15598774	10200817	Presence detection based on crowd surfing signal strength	Granted Active
US	15598879	10102539	Verification of redemption of an electronic offer	Granted Active
US	15606608	10181992	Centralized, scalable, resource monitoring system	Granted Active
US	15613918	9848300	Location based discovery of real-time merchant device activity	Granted Active
US	15619786	10360516	Automated dynamic data quality assessment	Granted Active
US	15623713	10572492	Method, apparatus, and computer program product for ranking content channels	Granted Active
US	15659138	10909585	Method and system for programmatic analysis of consumer reviews	Granted Active
US	15664605	10356051	Obfuscation of email addresses	Granted Active
US	15667666	11120345	Method, apparatus, and computer program product for determining closing metrics	Granted Active
US	15677369	10955989	Learning user interface apparatus, computer	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			program product, and method	
US	15684723	10142784	Method and system for enabling the creation and maintenance of proximity-related user groups	Granted Active
US	15686724	10489800	Discovery of new business openings using web content analysis	Granted Active
US	15698203	10460356	Generic message injection system	Granted Active
US	15711264	10922089	Mobile service applications	Granted Active
US	15784015	11062287	Consumer device based point-of-sale	Granted Active
US	15811956	10621819	Dynamic awarding of prizes in chance-based contests	Granted Active
US	15815299	10339163	Dynamic clustering for streaming data	Granted Active
US	15816536	10091617	Location based discovery of real-time merchant device activity	Granted Active
US	15826562	10706439	Predictive recommendation system using tiered feature data	Granted Active
US	15840364	11087045	Apparatus and method for option data object performance prediction and modeling	Granted Active
US	15840452	11232367	Apparatus and method for forecasted performance level adjustment and modification	Granted Active
US	15840536	10219105	Apparatus and method for distance-based option data object filtering and modification	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15853389	11423421	Method, apparatus, and computer program product for system resource volume prediction	Granted Active
US	15855918	11418578	Method, apparatus, and computer program product for balancing network resource demand	Granted Active
US	15856707	11609880	SERVER FOR INGESTING AND RENDERING DATA OBJECTS	Granted Active
US	15856718	10922279	Server for ingesting and updating renderable data objects from a flat file server	Granted Active
US	15856771	11328074	Server for verification, validation, and updating a data item database containing renderable data objects	Granted Active
US	15858335	10776805	Providing discounts to non-partner merchants	Granted Active
US	15859871	10382888	Mobile proximity based messages	Granted Active
US	15904791	10839421	Implicitly associating metadata using user behavior	Granted Active
US	15919414	10706435	Method, apparatus, and computer program product for calculating a supply based on travel propensity	Granted Active
US	15919742	10657560	Method, apparatus, and computer program product for classifying user search data	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15921747	10817886	Method, apparatus, and computer program product for identifying a service need via a promotional system	Granted Active
US	15926170	10510096	Visitor detection unit and identification system	Granted Active
US	15930635	11651155	System for determining consumer identification information at a point-of-sale	Granted Active
US	15953635	10657567	Method, apparatus, and computer program product for forecasting demand	Granted Active
US	15954847	11017440	Method, apparatus, and computer readable medium for providing a self-service interface	Granted Active
US	15957188	10713690	Configurable relevance service test platform	Granted Active
US	15978453	10983666	Learning user interface	Granted Active
US	15984604	10679265	Method, apparatus, and computer program product for lead assignment	Granted Active
US	15997921	10685362	Method, apparatus, and computer program product for forecasting demand using real time demand	Granted Active
US	16018673	10531235	Method and system for determining location of mobile device	Granted Active
US	16019584	10546314	Systems and methods for providing promotion sharing among consumers	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16026289	10965628	Dynamic customized electronic message content generation	Granted Active
US	16033928	10789301	Method, apparatus, and computer program product for inferring device rendered object interaction behavior	Granted Active
US	16033956	11216470	Method, apparatus, and computer program product for extending an action vector	Granted Active
US	16034575	11113308	Method, apparatus, and computer program product for improving network database functionalities	Granted Active
US	16037087	10366410	Offline location-based consumer metrics using online signals	Granted Active
US	16047392	10867318	Structured fine print	Granted Active
Ų\$	16047409	11023345	System and apparatus for automated evaluation of compatibility of data structures and user devices based on explicit user feedback	Granted Active
US	16050986	10311471	Graph-based compression of data records	Granted Active
US	16051955	10706430	Method, apparatus, and computer program product for consumer tracking	Granted Active
US	16105525	11182695	Method, apparatus, and computer program product for machine learning model lifecycle management	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16106167	10692101	Method, apparatus, and computer program product for providing a dashboard	Granted Active
US	16111743	10292010	Location based discovery of real-time merchant device activity	Granted Active
US	16121751	10997646	Systems and methods for providing multiple items to consumers	Granted Active
US	16121904	10592592	System and method for providing content to users based on interactions by similar other users	Granted Active
US	16122247	10891637	Computer system and computer-executed method for inventory valuation	Granted Active
US	16124271	10922705	Yield management through the classification of renderable data objects	Granted Active
US	16125631	11494798	Facilitating the application of a ledger to programmatically identify duplicate data objects indicative of multiple card-linked offers provided against a single transaction	Granted Active
US	16127341	10915942	Method, apparatus, and computer readable medium for providing a digital unwrapping trigger	Granted Active
US	T6129044	10867359	Systems and methods to implement point of sale (POS) terminals, process orders and manage order fulfillment	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16129992	11068539	Method and apparatus for identifying related records	Granted Active
US	16133835	11429944	Systems and methods for providing consumer facing point-of-sale interfaces	Granted Active
US	16138484	10802706	Method and system for facilitating consumer interactions for performing purchase commands	Granted Active
US	16139944	11037182	Transaction processing system	Granted Active
US	16151503	11138626	System for marketing campaign specification and secure digital coupon redemption	Granted Active
US	16154089	11074621	Deal allocation platform	Granted Active
US	16154757	11108724	Electronically referring a contact without divulging contact data	Granted Active
US	16154909	10672019	Verification of redemption of an electronic offer	Granted Active
ŪS	16154914	10664860	Verification of redemption of an electronic offer	Granted Active
US	16158665	10304076	Wearable device that is automatically configurable between wearer facing and redemption interfaces	Granted Active
US	16169018	10798524	Method and system for enabling the creation and maintenance of proximity-related user groups	Granted Active
US	16174496	10691889	Email suggestor system	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16175905	10810606	Method, apparatus, and computer program product for providing a search feedback system	Granted Active
US	16176793	10713707	Online ordering for inshop service	Granted Active
US	16180674	11216176	Method and system for adjusting item relevance based on consumer interactions	Granted Active
US	16189325	10783553	Method and apparatus for providing promotion recommendations	Granted Active
US	16192197	10963530	Clustering and coranking of multi-source location data	Granted Active
US	16196918	11263620	Consumer device payment token management	Granted Active
US	16212019	10892970	Centralized, scalable, resource monitoring system	Granted Active
US	16217087	10878460	Method and apparatus for determining promotion pricing parameters	Granted Active
US	16218830	11308107	Method, apparatus, and computer program product for network data linking and transmission thereof	Granted Active
US	16225143	11250467	Inbox management system	Granted Active
US	16225165	10631124	Presence detection based on crowd surfing signal strength	Granted Active
US	16228485	11276089	Method, apparatus, and computer program product for adaptive tail digital content object bid value generation	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16228503	11593844	Method, apparatus, and computer program product for predictive initial electronic bid value generation for new digital content objects	Granted Active
US	16228519	11657431	Method, system, and apparatus for programmatically determining and adjusting electronic bid values for a digital content object	Granted Active
US	16228532	11250477	Method, system, and apparatus for programmatically determining and adjusting electronic bid values for a digital content object based on conversion rates	Granted Active
US	16228547	10715855	Method, system, and apparatus for programmatically generating a channel incrementality ratio	Granted Active
US	16229300	11392971	Methods and systems for generating a supply index indicative of a quality of available supply of merchant promotions	Granted Active
US	16229304	11551247	Methods and systems for determining a travel propensity configured for use in the generation of a supply index indicative of a quality of available supply	Granted Active
US	16238241	10970735	Facilitating reward program for consumer	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			transactions and redemptions of deal offers	
US	16238468	10891658	Predictive recommendation system using contextual relevance	Granted Active
US	16238473	10977694	Predictive recommendation system using price boosting	Granted Active
US	16238476	10902477	Predictive recommendation system using absolute relevance	Granted Active
US	16241618	10820178	System and method for notification transmission and confirmation management	Granted Active
US	16245354	10862937	Method, apparatus, and computer program product for controlling content distribution	Granted Active
US	16249058	11216845	Automated deal guide user interface	Granted Active
US	16251809	10803487	System for providing impressions based on consumer preferences for future promotions	Granted Active
US	16254040	10891474	Optical receipt processing	Granted Active
US	16254201	10536797	Apparatus and method for distance-based option data object filtering and modification	Granted Active
US	16257122	10827315	Facilitating user interactions based on proximity	Granted Active
ÚS	16257335	11307742	Interactive personalized graphical feedback overlay	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16264177	11062354	Consumer presence based deal offers	Granted Active
US	16265087	11257124	Method for determining provider parameters including a provider margin	Granted Active
US	16270685	10817887	Method, apparatus, and computer program product for setting a benchmark conversion rate	Granted Active
US	16270722	11036921	System, apparatus, and method for page composition	Granted Active
US	16279731	11392837	Automated adaptive data analysis using dynamic data quality assessment	Granted Active
US	16284016	11093980	Fine print builder	Granted Active
US	16295036	11157957	Method, apparatus, system, and computer program product for selecting an image associated with a promotion	Granted Active
US	16295506	11030026	System and method for error detection and monitoring of objectasset pairs	Granted Active
US	16351235	11037201	Method and system for distribution of application program for promotion and marketing service	Granted Active
US	16352908	11100553	Customized deal generation	Granted Active
US	16355114	10902467	Pull-type searching system	Granted Active
US	16371199	11543934	Learning user interface	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16374099	10542376	Location based discovery of real-time merchant device activity	Granted Active
US	16380526	11386461	Deal generation using point-of-sale systems and related methods	Granted Active
US	16386483	11100542	Method, apparatus, and computer readable medium for providing a self-service interface	Granted Active
US	16387852	10650401	Wearable device that is automatically configurable between wearer facing and redemption interfaces	Granted Active
US	16392038	11250471	Method and apparatus for creating web content and identifying advertisements for users creating and viewing content	Granted Active
US	16392255	10614486	Graph-based compression of data records	Granted Active
US	16394659	11164174	Peer-to-peer payment processing	Granted Active
US	16396228	11604836	Method, apparatus, and computer program product for predictive dynamic bidding rule generation for digital content objects	Granted Active
US	16397333	11030647	Cadence management system for consumer promotions	Granted Active
US	16401018	10592918	Predictive recommendation system using tiered feature data	Granted Active
US	16401509	11379871	Method, apparatus, and computer program product for providing real time incentives	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16403054	10825046	Predictive recommendation system	Granted Active
US	16411177	11061986	System, method, and computer program product for automated discovery, curation and editing of online local content	Granted Active
US	16417949	11068708	Method, apparatus, and computer program product for classification of documents	Granted Active
US	16418267	11016996	Dynamic clustering for streaming data	Granted Active
US	16419091	11138629	Automated approval of generated promotions	Granted Active
US	16427380	11263659	Dynamic promotion analytics	Granted Active
US	16432167	10897454	Obfuscation of email addresses	Granted Active
US	16433570	11429539	System, method, apparatus, and computer program product for providing a cache mechanism	Granted Active
US	16433762	11295215	Automated dynamic data quality assessment	Granted Active
US	16434757	11100531	Method and apparatus for clustering platform sessions and user accounts associated with the platform sessions	Granted Active
US	16437111	11037189	Promotion system for determining and correcting for insufficiency of promotion data	Granted Active
US	16439073	11176576	Mobile visual locator	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16445261	10600079	Offline location-based consumer metrics using online signals	Granted Active
US	16447423	10650606	Interactive virtual reality system	Granted Active
US	16451254	10922707	Facilitating consumer payments and redemptions of deal offers	Granted Active
US	16455042	11432102	Mobile proximity based messages	Granted Active
UŚ	16502729	11036772	Method, system, and apparatus for rapid geographic search in an actor-based geographic search network	Granted Active
US	16507148	11308511	METHOD AND APPARATUS FOR GENERATING AN ELECTRONIC COMMUNICATION	Granted Active
US	16510373	11343165	Method, apparatus and computer program product for improving dynamic retry of resource service	Granted Active
US	16511045	10853401	Method, apparatus, and computer program product for classification and tagging of textual data	Granted Active
US	16519710	11232464	Systems, apparatus, and methods of programmatically determining unique contacts based on crowdsourced error correction	Granted Active
US	16526395	11100067	Apparatus and method for data object generation and control	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16535596	10878449	Method, apparatus, and computer program product for automated approval of a promotion structure	Granted Active
US	16536350	11100526	Method, apparatus, and computer program product for autoreplenishing an inventory of promotions	Granted Active
US	16542349	10908807	Method, apparatus, and computer program product for facilitating the playback of interface events	Granted Active
US	16545412	11068930	Reimpression promotion system	Granted Active
US	16551953	11568461	Facilitating online transactions	Granted Active
US	16552531	10990987	Apparatus and method for enhanced message targeting	Granted Active
US	16555186	11004059	Systems and methods for providing shared promotion redemptions	Granted Active
US	16555892	11127031	Systems and methods for providing dimensional promotional offers	Granted Active
US	16566658	11599596	Systems and methods for optimizing a webpage based on historical and semantic optimization of webpage decision tree structures	Granted Active
US	16566684	11245777	Multi-application interactive support and communication interface	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16572685	10929895	Generic message injection system	Granted Active
US	16574762	11188932	Method, apparatus, and computer program product for providing mobile location based sales lead identification	Granted Active
US	16579716	11194821	Enforcing diversity in ranked relevance results returned from a universal relevance service framework	Granted Active
US	16587085	11062352	Deal program life cycle	Granted Active
US	16659751	11157932	Incentivizing sharing in social networks	Granted Active
US	16660517	11244328	Discovery of new business openings using web content analysis	Granted Active
US	16661476	11157969	Automated deal guide structure identification	Granted Active
US	16661642	11593849	Employee profile for customer assignment, analytics and tip payments	Granted Active
US	16667141	11244244	Machine learning systems architectures for ranking	Granted Active
US	16667385	11188221	Mobile device merchant availability interface	Granted Active
US	16670948	11074622	Real-time predictive recommendation system using per-set optimization	Granted Active
US	16671774	11282111	Location based advertising systems	Granted Active
US	16682031	10929868	Apparatus and method for utilizing immediate gratification promotions	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16701992	11304032	Method and system for determining location of mobile device	Granted Active
US	16707706	11159908	Apparatus and method for distance-based option data object filtering and modification	Granted Active
US	16710019	10779119	Location based discovery of real-time merchant device activity	Granted Active
us	16710415	11669864	DETERMINING LOCATIONS OF INTEREST BASED ON USER VISITS	Granted Active
US	16726436	11574342	Seamless promotion redemption	Granted Active
US	16734770	11250459	Rewards program	Granted Active
US	16734852	10943245	Systems and methods for providing promotion sharing among consumers	Granted Active
US	16744405	11347757	Method, apparatus, and computer program product for ranking content channels	Granted Active
US	16774639	10846461	System and method for providing content to users based on interactions by similar other users	Granted Active
US	16776944	11120419	Prescient and adaptive point-of-sale systems	Granted Active
US	16784104	11210695	Predictive recommendation system using tiered feature data	Granted Active
US	16804788	11023922	Graph-based compression of data records	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16805343	11551245	Determining transactional networks using transactional data	Granted Active
US	16813954	11172330	Presence detection based on crowd surfing signal strength	Granted Active
US	16815104	11321993	Dynamic awarding of prizes in chance-based contests	Granted Active
US	16816072	11093920	Systems and methods for programmatically grouping consumer devices into stable spatial clusters	Granted Active
US	16828595	11120635	Interactive virtual reality system	Granted Active
US	16833002	11593874	Managing merchant communications	Granted Active
US	16837738	10949871	Wearable device that is automatically configurable between wearer facing and redemption interfaces	Granted Active
US	16844055	11475477	Generating promotion offers and providing analytics data	Granted Active
US	16845617	11238496	Method, apparatus, and computer program product for predicting web browsing behaviors of consumers	Granted Active
US	16845869	11379523	Method and apparatus for implementing a search index generator	Granted Active
US	16848025	11049172	Method, apparatus, and computer readable medium for group gifting in a randomized format	Granted Active
US	16848479	11375343	Facilitating user interactions based on proximity	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16854434	11240060	Apparatus, system, and method for providing simultaneous delivery of output communications	Granted Active
US	16855756	11100527	Verification of redemption of an electronic offer	Granted Active
US	16855778	11379891	Method, apparatus, and computer program product for forecasting demand	Granted Active
US	16857940	10984435	Method, apparatus, and computer program product for offering and processing promotions	Granted Active
US	16862041	11620640	CONSUMER DEVICE BASED POINT-OF- SALE	Granted Active
US	16866614	11416880	Method, apparatus, and computer program product for forecasting demand using real time demand	Granted Active
US	16867018	11244343	Embedded storefront	Granted Active
US	16869439	11593694	Apparatus, method, and non-transitory computer storage medium for performing predictive inferences using multiple predictive models	Granted Active
US	16870535	11153711	Methods and systems for detecting aggregation events	Granted Active
US	16875138	11468454	Method, apparatus, and computer program product for consumer tracking	Granted Active
US	16878197	11188943	Method and apparatus for providing promotion recommendations	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16879330	11354703	Generating optimized in-channel and cross-channel promotion recommendations using free shipping qualifier	Granted Active
US	16882846	11282128	System and method for generating purchase recommendations based on geographic zone information	Granted Active
US	16884259	11416922	Method and apparatus for facilitating meta search proxy bidding	Granted Active
US	16884828	11074600	Method, apparatus, and computer program product for calculating a supply based on travel propensity	Granted Active
US	16884855	11200593	Predictive recommendation system using tiered feature data	Granted Active
US	16887972	11348156	System and method for generating purchase recommendations based on geographic zone information	Granted Active
US	16891743	11615459	Online Ordering For In- Shop Service	Granted Active
US	16892979	11044509	Method, system, and apparatus for programmatically generating a channel incrementality ratio	Granted Active
US	16895317	11430013	Configurable relevance service test platform	Granted Active
US	16910290	11403331	Multi-term query subsumption for document classification	Granted Active
US	16910620	11354716	Systems and methods for determining redemption time	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16913035	11392564	Hybrid data integration platform	Granted Active
US	16915098	11494806	Generating optimized in-channel and cross-channel promotion recommendations using free shipping qualifier	Granted Active
US	16933562	11244356	Motion data based consumer interfaces	Granted Active
US	16946499	11392986	Apparatus, method, and computer program product for generating promotion request data	Granted Active
US	16984785	11308506	Apparatus and method for enhanced message targeting	Granted Active
US	16989987	11429997	Providing discounts to non-partner merchants	Granted Active
US	16990401	10972867	Location based discovery of real-time merchant device activity	Granted Active
US	16990540	11108701	System and method for object-response asset authorization and pairing	Granted Active
US	16994027	11468475	Apparatuses, computer program products, and methods for generation of augmented reality interfaces	Granted Active
US	16997305	11409431	Method and system for facilitating consumer interactions for performing purchase commands	Granted Active
US	16997814	11200599	Method and apparatus for providing promotion recommendations	Granted Active
US	17001500	11544774	Method, apparatus, and computer program product for device	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			rendered object sets based on multiple objectives	
US	17006114	11275789	Method, apparatus, and computer program product for inferring device rendered object interaction behavior	Granted Active
US	17009289	11615438	EXPORTER	Granted Active
US	17012293	11249641	Method and system for defining consumer interactions for initiating execution of commands	Granted Active
US	17012763	11570574	Method and system for enabling the creation and maintenance of proximity-related user groups	Granted Active
US	17012776	11468456	Method and system for generating purchase recommendations based on purchase category associations	Granted Active
US	17018744	11475483	System for providing impressions based on consumer preferences for future promotions	Granted Active
US	17021583	11321723	Method, apparatus, and computer program product for providing a search feedback system	Granted Active
US	17025499	11323863	System and method for notification transmission and confirmation management	Granted Active
US	17025710	11562443	Systems and methods to implement point of sale (POS) terminals,	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			process orders and manage order fulfillment	
US	17027176	11488201	Inbox management system	Granted Active
US	17027298	11625756	UNINSTALLED SOFTWARE APPLICATION IDENTIFICATION AND PROCESSING VIA A COMPUTER- EXECUTABLE TOOL CONFIGURED TO IDENTIFY UNRESOLVED PROGRAM LINKS	Granted Active
US	17029121	11315131	Method, apparatus, and computer program product for identifying a business need via a promotional system	Granted Active
US	17031333	11475479	Systems and methods for providing optimized leading messages in an email subject	Granted Active
US	17036933	11625753	Implicitly associating metadata using user behavior	Granted Active
US	17062026	11587116	Predictive recommendation system	Granted Active
US	17062209	11250472	Method and system for providing electronic marketing communications for a promotion and marketing service	Granted Active
US	17065239	11315146	Systems, apparatus, and methods for providing promotions based on consumer interactions	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17072141	11347790	System and method for providing content to users based on interactions by similar other users	Granted Active
US	17075893	11442939	Configurable and incremental database migration framework for heterogeneous databases	Granted Active
US	17078993	11676172	UNIFIED PAYMENT AND RETURN ON INVESTMENT SYSTEM	Granted Active
US	17080314	11238081	Method, apparatus, and computer program product for classification and tagging of textual data	Granted Active
US	17088693	11310299	Method, apparatus, and computer program product for controlling content distribution	Granted Active
US	17091432	11481814	Method and apparatus for determining promotion pricing parameters	Granted Active
US	17098608	11195204	Method, apparatus, and computer program product for automated approval of a promotion structure	Granted Active
US	17098987	11334907	Structured fine print	Granted Active
US	17103109	11392631	System and method for programmatic generation of attribute descriptors	Granted Active
US	17108547	11514462	Computer system and computer-executed method for inventory valuation	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17113374	11381488	Centralized, scalable, resource monitoring system	Granted Active
US	17115447	11538263	Optical receipt processing	Granted Active
US	17115456	11631107	Apparatuses, methods, and computer program products for application triggered non-execution installation state detection and application launching	Granted Active
US	17116613	11587104	Transaction processing system	Granted Active
US	17116688	11676178	PREDICTIVE RECOMMENDATION SYSTEM USING CONTEXTUAL RELEVANCE	Granted Active
US	17116871	11574335	Apparatus and method for utilizing immediate gratification promotions	Granted Active
US	17125158	11587123	Predictive recommendation system using absolute relevance	Granted Active
US	17139573	11243682	Method, apparatus, and computer program product for facilitating the playback of interface events	Granted Active
US	17148239	11593836	Inbox management system	Granted Active
US	17148908	11544728	Facilitating consumer payments and redemptions of deal offers	Granted Active
US	17171114	11397964	Wearable device that is automatically configurable between wearer facing and redemption interfaces	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17172500	11615440	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR SUPPRESSING CONTENT FROM RANKED POSITIONING IN ELECTRONIC CORRESPONDENCE BASED ON RULES- BASED SCORING	Granted Active
US	17183705	11652766	DYNAMIC CUSTOMIZED ELECTRONIC MESSAGE CONTENT GENERATION	Granted Active
US	17191940	11659353	Location Based Discovery Of Real- Time Merchant Device Activity	Granted Active
US	17215968	11676162	APPARATUS AND METHOD FOR ENHANCED MESSAGE TARGETING	Granted Active
US	17239090	11614984	SYSTEM AND METHOD FOR ERROR DETECTION AND MONITORING OF OBJECT-ASSET PAIRS	Granted Active
US	17247535	11252131	Obfuscation of email addresses	Granted Active
US	17247938	11579891	Mobile service applications	Granted Active
US	17301024	11403660	Method, apparatus, and computer program product for offering and processing promotions	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17301085	11501361	Systems and methods for generating a user interface including item selection interface elements arranged based on relevance data and configured for executing transition routines based on receipt of an expiration signal	Granted Active
US	17301570	11669424	SYSTEM AND APPARATUS FOR AUTOMATED EVALUATION OF COMPATIBILITY OF DATA STRUCTURES AND USER DEVICES BASED ON EXPLICIT USER FEEDBACK	Granted Active
US	17302296	11449895	Graph-based compression of data records	Granted Active
US	17303874	11593838	Method, apparatus, and computer program product for providing a shared map interface	Granted Active
US	17305905	11615439	METHOD AND APPARATUS FOR CLUSTERING PLATFORM SESSIONS AND USER ACCOUNTS ASSOCIATED WITH THE PLATFORM SESSIONS	Granted Active
US	17316190	11615123	METHOD, SYSTEM, AND APPARATUS FOR RAPID GEOGRAPHIC SEARCH IN AN ACTOR-BASED	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			GEOGRAPHIC SEARCH NETWORK	
US	17320915	11538018	Secure communication protocols for proximity-based validation in distributed multi-device frameworks	Granted Active
US	17322384	11496785	Method, system, and apparatus for programmatically generating a channel incrementality ratio	Granted Active
US	17350686	11620339	METHOD AND APPARATUS FOR IDENTIFYING RELATED RECORDS	Granted Active
US	17364799	11593841	Promotional system interaction tracking	Granted Active
us	17370349	11582164	System and method for object-response asset authorization and pairing	Granted Active
US	17370693	11681673	Apparatus And Method For Data Object Generation And Control	Granted Active
US	17374487	11468463	Method, apparatus, and computer program product for autoreplenishing an inventory of promotions	Granted Active
US	17444622	11599905	Method and system for recommending promotions to consumers	Granted Active
US	17444794	11593832	Deal scoring system and method	Granted Active
US	17445003	11580708	Interactive virtual reality system	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17451250	11651393	MOBILE VISUAL LOCATOR	Granted Active
US	17495194	11546727	Presence detection based on crowd surfing signal strength	Granted Active
US	17506294	11669762	APPARATUS AND METHOD FOR FORECASTED PERFORMANCE LEVEL ADJUSTMENT AND MODIFICATION	Granted Active
US	17511350	11599904	Method, apparatus, and computer program product for predicting consumer behavior	Granted Active
US	17540793	11568440	Method, apparatus, and computer program product for automated approval of a promotion structure	Granted Active
US	17569845	11662901	METHOD AND SYSTEM FOR DEFINING CONSUMER INTERACTIONS FOR INITIATING EXECUTION OF COMMANDS	Granted Active
US	17644875	11599567	Method, apparatus, and computer program product for classification and tagging of textual data	Granted Active
US	17646016	11579768	Method, apparatus, and computer program product for facilitating the playback of interface events	Granted Active
US	17661295	11681750	SYSTEM AND METHOD FOR PROVIDING	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			CONTENT TO USERS BASED ON INTERACTIONS BY SIMILAR OTHER USERS	
US	17808779	11636506	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR OFFERING AND PROCESSING PROMOTIONS	Granted Active
US	09605818	7627498	System and method for utilizing redemption information	Granted Active
US	14039227		Getaways System	Abandoned Inactive
US	14103290		Editorial Content Service	Abandoned Inactive
US	14200699		Method, Apparatus, And Computer Readable Medium For Providing A Modular Self-Service Framework	Abandoned Inactive
US	14539933		Sourcing Goods Based On Predictive Modeling	Pending Active
US	14568514		System For Predicting Consumer Purchasing Of Promotions	Abandoned Inactive
US	14578192		Processing Dynamic Data Using An Adaptive Oracle- Trained Learning System	Abandoned Inactive
US	14705449		Method, Apparatus, And Computer Readable Medium For Providing Management Of Stored Balance Cards	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	14826321		Method, Apparatus, And Computer Program Product For Authenticating A Consumer For Access To Media And Purchase Of A Promotional Instrument	Abandoned Inactive
US	14843170	11748798	Method and Apparatus For Item Selection	Granted Active
US	14865118		Method And Apparatus For Programmatic Promotion Generation Based On Business Analytic Data	Abandoned Inactive
US	14869517		System And Method For Detecting Commercial Hot-Spots Based On Geographic Zone Information	Abandoned Inactive
US	14980703		System And Apparatus For Automatic Review Generation	Abandoned Inactive
US	15085849		Probabilistic Inventory Management	Abandoned Inactive
US	15085851		Electronic Travel Planner	Pending Active
US	15167155		Methods And Systems For Programmatic Control Of Transmitted Electronic Content	Abandoned Inactive
US	15474102		Methods And Systems For Programmatic Control Of Transmitted Electronic Content	Pending Active
US	15489059	20170221128	Sentiment Extraction From Consumer Reviews For Providing Product Recommendations	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	15719185		Method And Apparatus For Facilitating A Response To A Metasearch Service Availability Call	Pending Active
US	16228557		Method, System, And Apparatus For Programmatically Segmenting User Profiles Based Upon Platform Activation Mechanisms	Abandoned Inactive
US	16418232	20200012963	Curating Training Data For Incremental Re- Training Of A Predictive Model	Abandoned Inactive
US	16420478	20190347700	Method, Apparatus, and Computer Program Product for Calculating a Provider Quality Score	Abandoned Inactive
US	16421669		Methods And Systems For Generating A Mix- Enforced List Of Items Utilizing Maximal Marginal Relevance	Abandoned Inctive
US	16459679	20200034895	PAY-FOR-VISIT ADVERTISING BASED ON VISITS TO PHYSICAL LOCATIONS	Pending Active
US	16510347		Method, Apparatus And Computer Program Product For Real-Time Circuit Breaker In Server Resource Platform	Abandoned Inactive
US	16547340	20190378044	PROCESSING DYNAMIC DATA WITHIN AN ADAPTIVE ORACLE- TRAINED LEARNING	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			SYSTEM USING CURATED TRAINING DATA FOR INCREMENTAL RE- TRAINING OF A PREDICTIVE MODEL	
US	16576984	20200125250	METHOD AND SYSTEM FOR A PREDEFINED SUITE OF CONSUMER INTERACTIONS FOR INITIATING EXECUTION OF COMMANDS	Pending Active
US	16682527	20200294076	SYSTEM AND METHOD FOR INCENTIVES	Pending Active
US	16683788	20200258121	VISITOR DETECTION UNIT AND IDENTIFICATION SYSTEM	Pending Active
US	16684754	20200193467	Method And Apparatus For Payment, Return On Investment, And Impact Reporting	Abandoned inactive
US	16704948	20200184532	Universal Relevance Service Framework	Abandoned Inactive
US	16710520	20200294088	SYSTEMS AND METHODS FOR PROVIDING STREAMLINED MULTIPLE ITEM TRANSACTIONS	Pending Active
US	16722915		Apparatuses, Methods, And Computer Program Products For Crediting Value To A Third-Party User Account Automatically Using Deep Linking	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16726101	11816588	Forecasting Demand Using Hierarchical Temporal Memory	Granted Active
US	16733138	20200219042	METHOD AND APPARATUS FOR MANAGING ITEM INVENTORIES	Abandoned Inactive
US	16734723	20200226641	AUTOMATED DEAL GUIDE OPTIMIZATION	Abandoned Inactive
US	16734811	20200272917	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR DETERMINING A PROVIDER RETURN RATE	Abandoned Inactive
US	16792760	20200258080	FACILITATING END- TO-END ENCRYPTION FOR E- COMMERCE	Pending Active
US	16803120	20200302473	METHOD AND APPARATUS FOR RETURN ON INVESTMENT IMPACT REPORTING	Abandoned Inactive
US	16805350	20200273068	OFFLINE LOCATION- BASED CONSUMER METRICS USING ONLINE SIGNALS	Abandoned Inactive
US	16809285	20200302337	AUTOMATIC SELECTION OF HIGH QUALITY TRAINING DATA USING AN ADAPTIVE ORACLE- TRAINED LEARNING FRAMEWORK	Abandoned Inactive
US	16821616		Communication Beacon Based Promotions For Mobile Devices	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	16832696	20200293951	DYNAMICALLY OPTIMIZING A DATA SET DISTRIBUTION	Pending Active
US	16844454	20200302488	METHOD AND APPARATUS FOR PROMOTION TEMPLATE GENERATION	Abandoned Inactive
US	16849751	20200311792	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING A USER PLATFORM FOR A REAL-TIME MARKETPLACE	Abandoned Inactive
US	16855739	20200364761	Merchant Deal Creation And Redemption System	Abandoned Inactive
US	16868406		System For Generating And Qualifying Deal Promotions In An Internet Marketplace	Abandoned Inactive
US	16904152	20200320561	METHOD AND APPARATUS USING CONTEXT TO DETERMINE CONSUMER DEALS	Pending Active
US	16939906	20210012384	CLIENT-BASED DEAL FILTERING AND DISPLAY	Abandoned Inactive
US	16984814	20210019786	SYSTEM FOR PROVIDING A SERVICE TO VENUES WHERE PEOPLE PERFORM TRANSACTIONS	Abandoned Inactive
US	17014766		Merchant Incremental Electronic Impact Value Prediction And Ranking Using Multiple Machine Learning Models	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17023551	20210133841	METHOD, MANUFACTURE, AND APPARATUS FOR FACILITATING ON-DEMAND HOME AND AUTO SERVICES	Pending Active
US	17033156	20210081479	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR GENERATION OF LOCAL CONTENT CORPUS	Abandoned Inactive
US	17071177	20210241293	APPARATUSES, COMPUTER- IMPLEMENTED METHODS, AND COMPUTER PROGRAM PRODUCTS FOR IMPROVED MODEL- BASED DETERMINATIONS	Abandoned Inactive
US	17108665	11710154	Method, Apparatus, And Computer Program Product For Facilitating Dynamic Pricing	Granted Active
US	17127493	20210182897	CONSUMER BOOKING AVAILABILITY ENGINE	Abandoned Inactive
US	17128590	20210192566	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR ASCERTAINING A DEMAND OF PROMOTIONS	Pending Active
US	17132915	20210256574	METHOD AND SYSTEM FOR PROGRAMMATIC ANALYSIS OF	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			CONSUMER REVIEWS	
US	17142851	20210201382	METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR PROVIDING A DIGITAL UNWRAPPING TRIGGER	Pending Active
US	17146058	20210201352	SYSTEMS AND METHODS FOR PROVIDING GROUP PROMOTIONS	Abandoned Inactive
US	17147169	20210209650	PROMOTION OFFERING SYSTEM	Abandoned Inactive
US	17154157	11734715	PRE-FEATURE PROMOTION SYSTEM	Granted Active
US	17159401	20210224840	CONSUMER CROSS- CATEGORY DEAL DIVERSITY	Abandoned inactive
US	17165508	20210217064	METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR PROVIDING A SELF-SERVICE INTERFACE	Abandoned Inactive
US	17166171	11710146	SYSTEMS AND METHODS FOR PROVIDING PROMOTION SHARING AMONG CONSUMERS	Granted Active
US	17181061	20210374799	ITERATIVE PROCESS FOR INTELLIGENTLY MODELING A DIVERSE PORTFOLIO OF	Abandoned inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			AVAILABLE CONTENT	
US	17183860	20210256081	CLUSTERING AND CORANKING OF MULTI-SOURCE LOCATION DATA	Abandoned inactive
US	17188201	20210256554	FACILITATING REWARD PROGRAM FOR CONSUMER TRANSACTIONS AND REDEMPTIONS OF DEAL OFFERS	Pending Active
US	17190052	20210256541	METHOD AND SYSTEM FOR PROGRAMMATIC ANALYSIS OF CONSUMER SENTIMENT WITH REGARD TO ATTRIBUTE	Pending Active
US	17196134	20210192468	DESCRIPTORS METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR SCHEDULING APPOINTMENTS WITH DEAL OFFERS	Abandoned Inactive
US	17201515	11783378	METHOD AND APPARATUS FOR GENERATING AN ELECTRONIC COMMUNICATION	Granted Active
US	17203163	11733827	LEARNING USER INTERFACE	Granted Active
US	17219045	11704658	Systems And Methods For Providing Shared Promotion Redemptions	Granted Active
US	17223203	11868584	LEARNING USER INTERFACE	Granted Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17229382	20210233118	METHOD AND SYSTEM FOR DETERMINING USER PROFILE DATA FOR PROMOTION AND MARKETING SERVICE USING MOBILE APPLICATION PROGRAM INFORMATION	Abandoned Inactive
US	17235312	20210311968	DYNAMIC CLUSTERING FOR STREAMING DATA	Abandoned Inactive
US	17242050	20210319017	MOBILE SEARCH	Pending Active
US	17244102	20210342873	SYSTEM AND METHODS FOR DISCOUNT RETAILING	Abandoned Inactive
US	17247543	20210174393	Systems, Apparatus, And Methods for updating a webpage based on data communications indicating user-defined values	Abandoned Inactive
US	17247937	11836113	SERVER FOR INGESTING AND UPDATING RENDERABLE DATA OBJECTS FROM A FLAT FILE SERVER	Ganted Active
US	17248392	11704702	GENERIC MESSAGE INJECTION SYSTEM	Granted Active
US	17248589	20210150576	Systems, Apparatus, And Methods For Providing Local Promotions	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17248918	20210166268	SYSTEMS, APPARATUS, AND METHODS FOR PROVIDING ELECTRONIC NEWSFEED USER INTERFACES	Pending Active
US	17302045	20210264469	SYSTEMS, APPARATUS, AND METHODS FOR PROVIDING AN INTERACTIVE SELF- SERVICE INTERFACE FOR RECEIVING SELECTION OF SELECTABLE LOCATION INDICATORS AND GENERATING AN IMPRESSION OBJECT BASED ON THE	Pending Active
			SELECTION	
US	17302482	20210326925	CADENCE MANAGEMENT SYSTEM FOR CONSUMER PROMOTIONS	Pending Active
US	17303101	20220044282	CONSUMER PRESENCE BASED DEAL OFFERS	Pending Active
US	17313148	20210326969	SYSTEM, APPARATUS, AND METHOD FOR PAGE COMPOSITION	Abandoned Inactive
US	17316041	20210334833	TRANSACTION PROCESSING SYSTEM	Abandoned Inactive
US	17316268	20210406955	SYSTEMS AND METHODS FOR PROVIDING DIVERSIFIED	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			PROMOTIONAL MESSAGES	
US	17323055	20210342888	APPARATUSES, METHODS, AND COMPUTER PROGRAM PRODUCTS FOR MULTI-STEP INSTALLED APPLICATION PROGRAM SNAPSHOT	Pending Active
US	17323380	11687973	PROCESSING METHOD AND	Granted
			SYSTEM FOR DISTRIBUTION OF APPLICATION PROGRAM FOR PROMOTION AND MARKETING SERVICE	Active
US	17325706	20210342881	REIMPRESSION PROMOTION SYSTEM	Pending Active
US	17329280	20210279755	SYSTEM AND METHODS FOR DISCOUNT RETAILING	Abandoned Inactive
US	17329599	20210342883	DEAL PROGRAM LIFE CYCLE	Pending Active
US	17337167		Systems And Method For Parsing Text Spring Input Provided To A Criteria Receiver Of A Consumer Computing Device To Configuire An Electronic Communication With A Ranked List Of Promotions Via A Promotion And	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			Marketing Service Device	
us	17340156	20210365982	SALES ENHANCEMENT SYSTEM	Abandoned Inactive
US	17341907	20210374203	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR AUTOMATED DISCOVERY, CURATION AND EDITING OF ONLINE LOCAL CONTENT	Pending Active
US	17343186	20210406857	CONSUMER DEVICE BASED POINT-OF- SALE	Pending Active
US	17346938	11715315	SYSTEMS, METHODS AND COMPUTER READABLE MEDIA FOR IDENTIFYING CONTENT TO REPRESENT WEB PAGES AND CREATING A REPRESENTATIVE IMAGE FROM THE CONTENT	Granted Active
US	17348253	11687975	DEAL ALLOCATION PLATFORM	Granted Active
US	17354261	11798036	REAL-TIME PREDICTIVE RECOMMENDATION SYSTEM USING PER- SET OPTIMIZATION	Granted Active
US	17354549	20210357553	APPARATUS AND METHOD FOR OPTION DATA	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			OBJECT PERFORMANCE PREDICTION AND MODELING	
US	17355422	20210390568	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CALCULATING A SUPPLY BASED ON TRAVEL PROPENSITY	Abandoned Inactive
US	17361918	20210398171	FINE PRINT BUILDER	Abandoned Inactive
US	17366406	20210334835	YIELD MANAGEMENT THROUGH THE CLASSIFICATION OF RENDERABLE DATA OBJECTS	Pending Active
US	17374486	11741490	VERIFICATION OF REDEMPTION OF AN ELECTRONIC OFFER	Granted Active
US	17375295	20220036331	SYSTEMS AND METHODS FOR PROGRAMMATICAL LY GROUPING CONSUMER DEVICES INTO STABLE SPATIAL CLUSTERS	Abandoned Inactive
US	17375428	20210342721	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR DETERMINING CLOSING METRICS	Pending Active
US	17379367	20220005080	METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR PROVIDING A	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			SELF-SERVICE INTERFACE	
US	17399173	20220027913	PRESCIENT AND ADAPTIVE POINT- OF-SALE SYSTEMS	Pending Active
US	17443378	11790425	CUSTOMIZED DEAL GENERATION	Granted Active
US	17443503	11695725	ELECTRONICALLY REFERRING A CONTACT WITHOUT DIVULGING CONTACT DATA	Granted Active
US	17443898	20220019598	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR IMPROVING NETWORK DATABASE FUNCTIONALITIES	Abandoned Inactive
US	17444325	20220020050	SYSTEM FOR MARKETING CAMPAIGN SPECIFICATION AND SECURE DIGITAL COUPON REDEMPTION	Pending Active
US	17444704	20220027955	METHODS, APPARATUSES, AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING A PLATFORM FOR NEGOTIATION AND PROVISION OF PROMOTIONS	Pending Active
US	17445552	20220044280	CUSTOMIZATION OF MESSAGE DELIVERY TIME BASED ON	Pending Active

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Country	Application No.	Patent No./ Publication No.	Tiúe	Status
			CONSUMER BEHAVIOR	
US	17445662	20220044276	APPARATUS, COMPUTER- IMPLEMENTED METHODS, AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING DYNAMIC DATA- DRIVEN PROFILE BASED PERSONA DIMENSIONAL PROMOTION SELECTION	Pending Active
US	17446327	20220092639	AUTOMATED APPROVAL OF GENERATED PROMOTIONS	Abandoned inactive
US	17446336	20220092041	AUTOMATIC ENTITY RESOLUTION DATA CLEANING	Abandoned Inactive
US	17447355	20210406962	Apparatus, Method, and Computer Program Product For Providing Synchronous Delivery Of Active Media And Electronic Marketing Communications	Abandoned Inactive
US	17448057	20220172254	AUTOMATED DEAL GUIDE STRUCTURE IDENTIFICATION	Abandoned Inactive
US	17448363	20220075709	METHOD FOR TESTING MOBILE APPLICATION AND ASSOCIATED APPARATUS AND SYSTEM	Abandoned Inactive
US	17448574	20220253825	PEER-TO-PEER PAYMENT PROCESSING	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17449880	20220172253	SYSTEM, APPARATUS, METHOD, AND USER INTERFACE CONFIGURED FOR TRANSMISSION OF DATA VIA A WIRELESS AD-HOC NETWORK	Abandoned Inactive
US	17449906		Generating, Displaying, And Updating Display Streams On A Dual Facing User Interface In Real Time	Abandoned Inactive
US	17450197	20220101347	METHODS AND SYSTEMS FOR PROGRAMMATIC CONTROL OF TRANSMITTED ELECTRONIC CONTENT	Abandoned Inactive
US	17451997	20220044263	Dynamically Providing Altered Menu Content Data for Display In Response To Real-Time Constraint Data	Pending Active
US	17452005	20220044264	Dynamically Altering Displayed Menu Content Data In Response To Real-Time Event Data	Abandoned Inactive
US	17452657	20220164098	MOBILE DEVICE MERCHANT AVAILABILITY INTERFACE	Pending Active
US	17453898	20220129869	CONTRACTOR POINT OF SALE SYSTEM	Pending Active
US	17453911	20220129945	AUTOMATED DEAL GUIDE USER INTERFACE	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17454206	20220207540	SYSTEMS, APPARATUS, AND METHODS OF PROGRAMMATICAL LY DETERMINING UNIQUE CONTACTS BASED ON CROWDSOURCED ERROR CORRECTION	Abandoned Inactive
US	17456997	20220084057	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FACILITATING DYNAMIC CHANGE OF AN ADJUSTABLE SIZE COMPONENT OF A DISPLAYED ICON	Abandoned Inactive
US	17457482	20220137807	METHOD AND SYSTEM FOR USE OF BIOMETRIC INFORMATION ASSOCIATED WITH CONSUMER INTERACTIONS	Pending Active
US	17470705	20220101385	Merchant Booking Availability Engine	Abandoned Inactive
US	17478175	20220109946	METHODS AND SYSTEMS FOR DETECTING AGGREGATION EVENTS	Pending Active
US	17489070	20220092620	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR MERCHANT CLASSIFICATION	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17507315	20220148033	METHOD AND APPARATUS FOR PROVIDING PROMOTION RECOMMENDATION S	Abandoned Inactive
US	17508285	20220156269	ENFORCING DIVERSITY IN RANKED RELEVANCE RESULTS RETURNED FROM A UNIVERSAL RELEVANCE SERVICE FRAMEWORK	Abandoned Inactive
US	17521036	20220122102	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING MOBILE LOCATION BASED SALES LEAD IDENTIFICATION	Pending Inactive
US	17522208	20220138794	DYNAMIC PROMOTION ANALYTICS	Pending Active
US	17523288	20220180392	PREDICTIVE RECOMMENDATION SYSTEM USING TIERED FEATURE DATA	Abandoned inactive
US	17524526	20220180401	RANKED RELEVANCE RESULTS USING MULTI-FEATURE SCORING RETURNED FROM A UNIVERSAL RELEVANCE SERVICE FRAMEWORK	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17524533	20220215430	METHOD AND APPARATUS FOR PROVIDING PROMOTION RECOMMENDATION S	Abandoned Inactive
US	17528514	20220180250	PROCESSING DYNAMIC DATA WITHIN AN ADAPTIVE ORACLE- TRAINED LEARNING SYSTEM USING DYNAMIC DATA SET DISTRIBUTION OPTIMIZATION	Pending Active
US	17530641	11810151	PREDICTIVE RECOMMENDATION SYSTEM USING TIERED FEATURE DATA	Granted Active
US	17532474	20220155950	METHOD AND SYSTEM FOR ADJUSTING ITEM RELEVANCE BASED ON CONSUMER INTERACTIONS	Abandoned Inactive
US	17538346	20220164361	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR EXTENDING AN ACTION VECTOR	Abandoned Inactive
US	17541749		Ranking Of Candidate Promotions Using Thompson Sampling	Abandoned Inactive
US	17541824		Ranking Of Candidate Promotions Based On Promotion Events	Abandoned Inactive
US	17541885		Ranking Of Candidate Promotions Based On Conversion Scores For Promotions	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17550359	20220215426	SOURCING GOODS BASED ON PRE- FEATURE	Abandoned Inactive
			ANALYTICS	
US	17557763	20220222705	METHOD, APPARATUS, AND	Pending Active
			PROGRAM PRODUCT FOR PREDICTING WEB BROWSING	
			BEHAVIORS OF CONSUMERS	
US	17564929	20220198488	METHOD AND SYSTEM FOR PROGRAMMATIC GENERATION OF	Abandoned Inactive
			SURVEY QUERIES	
US	17570079	20220261852	METHOD AND APPARATUS FOR CREATING WEB CONTENT AND IDENTIFYING ADVERTISEMENTS	Abandoned Inactive
			FOR USERS CREATING AND VIEWING CONTENT	
US	17571129	20220237659	METHOD AND SYSTEM FOR PROVIDING ELECTRONIC MARKETING COMMUNICATIONS FOR A PROMOTION	Pending Active
			AND MARKETING SERVICE	
US	17574514	20220138790	DYNAMIC TIME- BASED ADJUSTMENT OF PREDICTIVE MODELING DATA	Pending Active
US	17580379	20220253894	NON-PROMOTION CONTENT	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			DETERMINATON SYSTEM	
US	17644224	20220253831	CONSUMER DEVICE PAYMENT TOKEN MANAGEMENT	Pending Active
US	17645351	11764993	APPARATUS, SYSTEM, AND METHOD FOR PROVIDING SIMULTANEOUS DELIVERY OF OUTPUT COMMUNICATIONS	Granted Active
US	17645772	20220198519	Motion Data Based Consumer Interfaces	Pending Active
US	17646003	20220198507	EMBEDDED STOREFRONT	Pending Active
US	17647271	20220237647	REWARDS PROGRAM	Abandoned Inactive
US	17647372	20220374942	METHOD, SYSTEM, AND APPARATUS FOR PROGRAMMATICAL LY DETERMINING AND ADJUSTING ELECTRONIC BID VALUES FOR A DIGITAL CONTENT OBJECT BASED ON CONVERSION RATES	Abandoned Inactive
US	17647770	20220284482	METHOD FOR DETERMINING PROVIDER PARAMETERS INCLUDING A PROVIDER MARGIN	Abandoned Inactive
US	17648504	20220318826	SYSTEMS, APPARATUS, AND METHODS OF PROGRAMMATICAL	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			LY DETERMINING UNIQUE CONTACTS	
US	17650094	20220301015	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR ADAPTIVE TAIL DIGITAL CONTENT OBJECT BID VALUE GENERATION	Pending Active
US	17650267	20220270133	LOCATION BASED ADVERTISING SYSTEMS	Abandoned Inactive
US	17654305	20220272486	METHOD AND SYSTEM FOR DETERMINING LOCATION OF MOBILE DEVICE	Pending Active
US	17654688	20220383359	METHOD AND APPARATUS FOR GENERATING AN ELECTRONIC COMMUNICATION	Pending Active
US	17655003	20220318246	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR NETWORK DATA LINKING AND TRANSMISSION THEREOF	Abandoned Inactive
US	17655633	20220317863	INTERACTIVE PERSONALIZED GRAPHICAL FEEDBACK OVERLAY	Abandoned Inactive
US	17656928	20220327638	SYSTEMS AND METHODS TO IMPLEMENT POINT OF SALE (POS) TERMINALS,	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			PROCESS ORDERS AND MANAGE ORDER FULFILLMENT	
US	17657058	20220245672	Method, Apparatus, and Computer Program Product for Generating Graphical User Interface for Facilating Complex User Interactions	Pending Active
US	17657147	20220292526	APPARATUS AND METHOD FOR ENHANCED MESSAGE TARGETING	Pending Active
US	17657829	20220366760	DYNAMIC AWARDING OF PRIZES IN CHANCE- BASED CONTESTS	Abandoned Inactive
US	17658709	20220309536	SYSTEMS AND METHODS FOR PROVIDING PROMOTIONS BASED ON SEARCH QUERIES	Pending Active
US	17659120	20220383356	METHOD, APPARATUS, AND COMPUTER READABLE MEDIUM FOR TRANSFERRING OF PROMOTIONS	Pending Active
US	17659500	20220351241	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FACILITATING THE ACTIVATION OF PROMOTIONS USING SHORT CODES	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17659952	20220358553	APPARATUSES, COMPUTER- IMPLEMENTED METHODS, AND COMPUTER PROGRAM PRODUCTS FOR IMPROVED USER ACCOUNT IDENTIFICATION FOR SHARED ACCOUNT LINKING	Pending Active
US	17662365	20220335490	SYSTEMS AND METHODS FOR DETERMINING REDEMPTION TIME	Pending Active
US	17662451	20220366461	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FORECASTING DEMAND	Abandoned inactive
US	17662503	20220335464	DIGITAL PORTAL CONFIGURED TO PROVIDE LOCATION TRIGGERED INTERACTIVE ELECTRONIC INTERFACES	Pending Active
US	17662787	20220270098	SYSTEM FOR REMOTE DUAL- SECURITY INSTRUMENT TRANSFER USING ENCRYPTED VERIFICATION DATA AND LOCATION-BASED AUTHENTICATION	Abandoned inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17668075	20220342940	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR INFERRING DEVICE RENDERED OBJECT INTERACTION BEHAVIOR	Pending Active
US	17678483		System And Apparatus For Self-Forming Ad- Hoc Group Promotions	Abandoned Inactive
US	17679508		Method, Apparatus, And Computer Program Product For Integrating At Least Two Remote Databases With A User Interface	Abandoned Inactive
US	17683499	20220261926	METHOD AND SYSTEM FOR CREDIT CARD HOLDER IDENTIFICATION	Pending Active
US	17684935	20220300828	AUTOMATED DYNAMIC DATA QUALITY ASSESSMENT	Pending Active
US	17689058	11689904	System And Method For Notification Transmission And Confirmation Management	Granted Active
US	17689129		Structured Fine Print	Abandoned Inactive
US	17692918		Network Data Object Processing System With Interdependence Identification Engine And Multi-Carousel Interface	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17696391	11736551	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION	Granted Active
US	17703160	20220284471	SYSTEMS, APPARATUS, AND METHODS FOR PROVIDING PROMOTIONS BASED ON CONSUMER INTERACTIONS	Pending Active
US	17711446	20220327561	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING A SEARCH FEEDBACK SYSTEM	Pending Active
US	17713592	20220343371	SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ELECTRONIC CORRESPONDENCE GENERATION BASE ON USER SEGMENT CLASSIFICATION	Pending Active
US	17716785	20220405794	System and method for throttling communications with consumer devices	Abandoned inactive
US	17717428	20220237636	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR IDENTIFYING A BUSINESS NEED VIA A PROMOTIONAL SYSTEM	Abandoned inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status	
US	17718133	11830034	METHOD AND APPARATUS FOR PROVIDING PROMOTION RECOMMENDATION S	Granted Active	
US	17733224		Controlling Transmission Of Communications Based On Sufficiency Of Available Data For Generation Of Confidence Measures	Pending Active	
US	17734450	20220366454	MOBILE CHAT APPLICATION INTEGRATION WITH PROMOTIONAL SYSTEMS	Pending Active	
US	17749525	20220351249	DEAL GENERATION USING POINT-OF- SALE SYSTEMS AND RELATED METHODS	Pending Active	
US	17804686	20220369075	FACILITATING USER INTERACTIONS BASED ON PROXIMITY	Pending Active	
US	17805143	20220366436	METHOD AND APPARATUS FOR PROVIDING AUTOMATED MARKET ANALYSIS TESTING	Pending Active	
US	17805504	20220382810	METHOD AND APPARATUS FOR IMPLEMENTING A SEARCH INDEX GENERATOR	Pending Active	
US	17805784	20220405785	METHODS AND SYSTEMS FOR PROGRAMMATIC CONTROL OF TRANSMITTED	Abandoned Inactive	

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Country	Application No.	Patent No./ Publication No.	Title	Status
			ELECTRONIC CONTENT	
US	17807520	20220391934	METHODS AND SYSTEMS FOR GENERATING A SUPPLY INDEX INDICATIVE OF A QUALITY OF AVAILABLE SUPPLY OF MERCHANT PROMOTIONS	Pending Active
US	17807687	20220391948	SYSTEMS, APPARATUS, AND METHODS OF PROVIDING PROMOTIONS BASED ON CONSUMER REQUEST	Pending Active
US	17809606	20220405255	Hybrid Data Integration Platform	Pending Active
US	17810395	20220414692	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FORECASTING DEMAND USING REAL TIME DEMAND	Abandoned Inactive
US	17811141	20220414760	METHOD AND APPARATUS FOR FACILITATING META SEARCH PROXY BIDDING	Pending Active
US	17812263	20230076405	PROVIDING DISCOUNTS TO NON-PARTNER MERCHANTS	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17813723	20230009934	SYSTEM, METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING A CACHE MECHANISM	Pending Active
US	17813747	11856474	MOBILE PROXIMITY BASED MESSAGES	Granted Active
US	17814069	20230052849	CONFIGURABLE RELEVANCE SERVICE PLATFORM INCORPORATING A RELEVANCE TEST DRIVER	Pending Active
US	17814717	11847583	SYSTEMS AND METHODS FOR PROVIDING CONSUMER FACING POINT-OF-SALE INTERFACES	Granted Active
US	17814987	20230025934	CONFIGURABLE AND INCREMENTAL DATABASE MIGRATION FRAMEWORK FOR HETEROGENEOUS DATABASES	Pending Active
US	17819511	11783370	GRAPH-BASED COMPRESSION OF DATA RECORDS	Granted Active
US	17825004	20220284465	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING REAL TIME INCENTIVES	Abandoned Inactive
US	17827218	20220398634	METHOD AND APPARATUS FOR PROVIDING PROMOTION VOUCHERS	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17839575	20220382794	SYSTEM AND METHOD FOR PROGRAMMATIC GENERATION OF ATTRIBUTE DESCRIPTORS	Abandoned Inactive
US	17842572	20220391935	METHOD AND APPARATUS FOR IDENTIFYING TRENDING PROMOTIONS	Pending Active
US	17842682	20230009563	AUTOMATED ADAPTIVE DATA ANALYSIS USING DYNAMIC DATA QUALITY ASSESSMENT	Pending Active
US	17851648		Optimized Device Rendered Objects For An Electronic Interface Based On Dynamic Machine Learning Modeling	Abandoned Inactive
US	17853039	20230020404	SYSTEM AND METHOD FOR MANAGING REQUEST-TO-TASK TRANSLATION AND SEQUENCING	Abandoned Inactive
US	17853113	20230045330	MULTI-TERM QUERY SUBSUMPTION FOR DOCUMENT CLASSIFICATION	Abandoned Inactive
US	17855974	20230015247	METHOD AND SYSTEM FOR FACILITATING CONSUMER INTERACTIONS FOR PERFORMING PURCHASE COMMANDS	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	17867122	20230017552	METHODS, APPARATUSES, AND SYSTEMS FOR PROVIDING AN EVENT EVALUATION FRAMEWORK	Pending Active
US:	17868558	20230004993	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR SYSTEM RESOURCE VOLUME PREDICTION	Pending Active
US	17873837	20220374937	GENERATING PROMOTION OFFERS AND PROVIDING ANALYTICS DATA	Abandoned Inactive
US	17881067	20230025641	Training a machine learning model to determine a predicted time distribution related to electronic communications	Abandoned Inactive
US	17886714	20230044338	METHOD AND APPARATUS FOR DETERMINING PROMOTION PRICING PARAMETERS	Abandoned Inactive
US	17888800	20230080661	DYNAMIC AUGMENTING OF RELEVANCE RANKINGS USING DATA FROM EXTERNAL RATINGS SOURCES	Abandoned Inactive
US	17900148	20230118419	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			FOR CONSUMER TRACKING	
US	17929130	20230073396	METHOD AND SYSTEM FOR GENERATING PURCHASE RECOMMENDATION S BASED ON PURCHASE CATEGORY ASSOCIATIONS	Pending Active
US	17931471		Systems And Methods For Providing Optimized Leading Messages	Pending Active
US	17933663	20230079643	SYSTEMS AND METHODS TO IMPLEMENT POINT OF SALE (POS) TERMINALS, PROCESS ORDERS AND MANAGE ORDER FULFILLMENT	Pending Active
US	17933737	20230153856	INBOX MANAGEMENT SYSTEM	Pending Active
US*	17935354	20230084410	GENERATING OPTIMIZED IN- CHANNEL AND CROSS-CHANNEL PROMOTION RECOMMENDATION S USING FREE SHIPPING QUALIFIER	Abandoned inactive
US	17935776	20230091708	GENERATING IN- CHANNEL AND CROSS-CHANNEL PROMOTION RECOMMENDATION	Abandoned inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			S USING PROMOTION CROSS SELL	
US	17938125	20230135248	FACILITATING THE APPLICATION OF A LEDGER TO PROGRAMMATICAL LY IDENTIFY DUPLICATE DATA OBJECTS INDICATIVE OF MULTIPLE CARD- LINKED OFFERS PROVIDED AGAINST A SINGLE TRANSACTION	Pending Active
US	17939564	20230075666	APPARATUSES, COMPUTER PROGRAM PRODUCTS, AND METHODS FOR GENERATION OF AUGMENTED REALITY INTERFACES	Pending Active
US	17940264	20230076555	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR AUTO- REPLENISHING AN INVENTORY OF PROMOTIONS	Abandoned Inactive
US	17943984	20230116277	SYSTEM FOR PROVIDING IMPRESSIONS BASED ON CONSUMER PREFERENCES FOR FUTURE PROMOTIONS	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	17962063	11863809	METHOD, SYSTEM, AND APPARATUS FOR PROGRAMMATICAL LY GENERATING A CHANNEL INCREMENTALITY RATIO	Granted Active
US	17966401	20230078627	CORRELATING REAL-TIME RESERVATION CAPACITY INFORMATION RECEIVED FROM THIRD PARTY DEVICES WITH DYNAMICALLY GENERATED VARIABLE DISCOUNTS	Abandoned inactive
US	17993640	20230162233	MESSAGING SYSTEM BASED ON NETWORK- PROVIDED LOCATION DATA OF MOBILE COMPUTING DEVICES	Pending Active
US	18045741	20230206310	Systems And Methods For Generating A User Interface Including Item Selection Interface Elements Arranged Based On Relevance Data And Configured For Executing Transition Routines Based On Receipt Of An Expiration Signal	Pending Active
US	18049487	20230206260	Computer System And Computer-Executed	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			Method For Inventory Valuation	
US	18057540		Dynamic Data-Driven Generation Of Graphical Interfaces	Pending Active
US	18058026	20230161449	LEARNING USER INTERFACE	Pending Active
US	18058153		Consumer Device Presence-Based Transaction Session	Pending Active
US	18058408	20230162165	OPTICAL RECEIPT PROCESSING	Pending Active
US	18059626	20230162273	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR DEVICE RENDERED OBJECT SETS BASED ON MULTIPLE	Pending Active
US	18060363	20230142327	OBJECTIVES PRESENCE DETECTION BASED ON CROWD SURFING SIGNAL STRENGTH	Abandoned Inactive
US	18060648	20230162222	FACILITATING CONSUMER PAYMENTS AND REDEMPTIONS OF DEAL OFFERS	Pending Active
US	18062224	11854057	FACILITATING ONLINE TRANSACTIONS	Granted Active
US	18063571		Methods And Systems For Determining A Travel Propensity Configured For Use In The Generation Of A Supply Index Indicative	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
			Of A Quality Of Available Supply	
US	18064372	20230103440	RANKING DATA OBJECTS USING MACHINE LEARNING AND SCORING TO CONFIGURE A GRAPHICAL INTERFACE	Abandoned inactive
US	18065380		Method And System For Enabling The Creation And Maintenance Of Proximity-Related User Groups	Pending Active
US	18068746		Unlocking Editorial Content	Pending Active
US	18069574		Method And Apparatus For Electronic Transactions Based On A Reply Message	Pending Active
US	18079241		Computing Early Adopters and Potential Influencers Using Transactional Data and Network Analysis	Pending Active
US	18086828	20230214879	Method, Apparatus, And Computer Program Product For Automated Approval Of A Promotion Structure	Abandoned inactive
US	18089772	11863463	System And Method For Object-Response Asset Authorization And Pairing	Granted Active
US	18091737	20230252523	Instrument System Interaction Tracking	Abandoned inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	18097872	20230267497	Deal Scoring System And Method	Abandoned Inactive
US	18112801		Method, System, And Apparatus For Rapid Geographic Search In An Actor-Based Geographic Search Network	Pending Active
US	18113239		Exporter	Pending Active
US	18113380		System And Method For Error Detection And Monitoring Of Object- Asset Pairs	Pending Active
US	18133446		Email Suggestor System	Abandoned Inactive
US	18137787		System And Apparatus For Automated Evaluation Of Compatibility Of Data Structures And User Devices Based On Explicit User Feedback	Abandoned Inactive
US	18139600		Apparatus And Method For Forecasted Performance Level Adjustment And Modification	Abandoned Inactive
US	18142261		Apparatus And Method For Data Object Generation And Control	Abandoned Inactive
US	18142727		Method, Apparatus, And Computer Program Product For Facilitating Dynamic Pricing	Abandoned Inactive
US	18145656		Seamless Promotion Redemption	Pending Active
US	18150547		Mobile Service Applications	Pending Active
US	18150843	20230245161	Apparatus And Method For Utilizing Immediate	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Gratification Promotions	
US	18153016		Transaction Processing System	Abandoned Inactive
US	18153766	11847754	Interactive Virtual Reality System	Granted Active
US	18154240	20230229301	Method, Apparatus, And Computer Program Product For Facilitating The Playback Of Interface Events	Pending Active
US	18156660		Predictive Recommendation System	Pending Active
US	18157415		Merchant Incremental Electronic Impact Value Prediction And Ranking Using Multiple Machine Learning Models	Pending Active
US	18157426		Predictive Recommendation System Using Absolute Relevance	Pending Active
US	18159526		Method, Apparatus, and Computer Program Product for Searching for Promotions	Pending Active
US	18160027		Employee Profile For Customer Assignment, Analytics And Payments	Pending Active
US	18160645	20230297862	Performing Predictive Inferences Using Multiple Predictive Models	Abandoned Inactive
US	18160669		Managing Merchant Communications	Pending Active
US	18160719	20230252521	Method, Apparatus, And Computer Program For Predicting Consumer Behavior	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	18160750		Method, Apparatus, And Computer Program Product For Predictive Initial Electronic Bid Value Generation For New Digital Content Objects	Abandoned Inactive
US	18161149		Method And Apparatus For Identifying Related Records	Pending Active
US	18161660		Inbox Management System	Abandoned Inactive
US	18162864	20230259973	Method And System For Recommending Promotions To Consumers	Abandoned Inactive
US	18163392		Systems And Methods For Optimizing A Webpage Based On Historical And Semantic Optimization Of Webpage Decision Tree Structures	Abandoned Inactive
US	18164898	20230259559	Method, Apparatus, And Computer Program Product For Predictive Dynamic Bidding Rule Generation For Digital Content Objects	Abandoned Inactive
US	18165156		Method, Apparatus, And Computer Program Product For Classification And Tagging Of Textual Data	Pending Active
US	18170050		Method, Apparatus, and Computer Program Product for Performing a Rules-Based Determination on the Suppression of an	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Electronic Presentation of an Item	
us	18170079		Server For Ingesting And Rendering Data Objects	Abandoned Inactive
US	18170597		Method And Apparatus For Clustering Platform Sessions And User Accounts Associated With The Platform Sessions	Abandoned Inactive
US	18171041		Online Ordering For In- Shop Service	Pending Active
US	18175211		Consumer Device Based Point-Of-Sale	Pending Active
US	18178188		Method And System For Defining Consumer Interactions For Initiating Execution Of Commands	Pending Active
US	18178239		Implicitly Associating Metadata Using User Behavior	Pending Active
US	18179631		Method And System For Providing Promotion Impressions Using Mobile Application Programs	Abandoned Inactive
US	18182526		Method, Apparatus, And Computer Program Product For Offering And Processing Promotions	Abandoned Inactive
US	18182877		Apparatuses, Methods, And Computer Program Products For Application Triggered Non-Execution Installation State	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			Detection And Application Launching	
US	18196593		Method, Apparatus, And Computer Program Product For Determining Closing Metrics	Abandoned Inactive
us	18200110		Method, Apparatus, And Computer Readable Medi um For Group Gifting In A Randomized Format	Abandoned Inactive
US	18205440		Systems And Methods For Providing Promotion Sharing Among Consumers	Abandoned Inactive
US	18209244		Method, Apparatus, And Computer Program Product For Classification Of Documents	Pending Active
US	18209598		Getaways Systems	Pending Active
US	18211674		Pull-Type Searching System	Pending Active
US	18220075		Method, Apparatus, And Computer Program Product For Controlling Content Distribution	Abandoned Inactive
US	18295403		Dynamic Customized Electronic Message Content Generation	Abandoned Inactive
US	18296089		Mobile Visual Locator	Abandoned Inactive
US	18297694	20230360106	Sentiment Extraction From Consumer Reviews For Providing Product Recommendations	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	18301488	20230368249	Method, System, And Apparatus For Programmatically Determining And Adjusting Electronic Bid Values For A Digital Content Object	Pending Active
US	18302320		Location Based Discovery Of Real- Time Merchant Device Activity	Abandoned Inactive
US	18304799	20230351445	Determining Locations Of Interest Based On User Visits	Pending Active
US	18309909		Unified Payment And Return On Investment System	Abandoned
US	18310134		Predictive Recommendation System Using Contextual Relevance	Abandoned Inactive
US	18310940		Apparatus And Method For Enhanced Message Targeting	Abandoned Inactive
US	18313155		System And Method For Providing Content To Users Based On Interactions By Similar Other Users	Abandoned Inactive
US	18315894	20230360086	Method And System For Distribution Of Application Program For Promotion And Marketing Service	Pending Active
US	18315940		Incentivizing Sharing In Social Networks	Abandoned Inactive
US	18317252		Method, Apparatus, And Computer Readable Medium For Providing A Modular Framework Of	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			Asynchronous And Parallel Processes	
US	18317583		Deal Allocation Platform	Abandoned Inactive
US	18318288		Electronically Referring A Contact Without Divulging Contact Data	Abandoned Inactive
US	18318775	20230370826	System And Method For Notification Transmission And Confirmation Management	Pending Active
US	18321182		Ad Targeting & Display Optimization Based On Social And Community Data	Abandoned Inactive
US	18322775	20230384909	Learning User Interface	Pending Active
US	18326296		Systems And Methods For Providing Shared Promotion Redemptions	Abandoned Inactive
US	18333048		Method, Apparatus, And Computer Readable Medium For Providing Management Of Stored Balance Cards	Pending Active
US	18334475		Prescient And Adaptive Point-Of-Sale Systems	Pending Active
US	18335455		Method and Apparatus For Item Selection	Pending Active
US	18339718		System And Method For Generating Geographic Zone Information For Consumers	Pending Active
US	18348067		Pre-Feature Promotion System	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	18349777		Machine Learning Systems Architectures For Ranking	Pending Active
US	18351157		Verification Of Redemption Of An Electronic Offer	Abandoned Inactive
US	18351340		Wearable Device That Is Automatically Configurable Between Wearer Facing And Redemption Interfaces	Abandoned Inactive
US	18365775		Discovery Of New Business Openings Using Web Content Analysis	Pending Active
US	10642894	20040039639	Method and apparatus for identifying potential buyers	Abandoned Inactive
US	11257456	20060069619	Systems and methods for facilitating group rewards	Abandoned Inactive
US	11410342	20060195368	System and process for local acquisition of products priced online	Abandoned Inactive
US	11424289	20060224465	SYSTEM AND PROCESS FOR LOCAL ACQUISITION OF PRODUCTS PRICED ONLINE	Abandoned Inactive
US	11424291	20060224466	SYSTEM AND PROCESS FOR LOCAL ACQUISITION OF PRODUCTS PRICED ONLINE	Abandoned Inactive
US	11681441	20070150354	METHOD AND APPARATUS FOR CONDUCTING A TRANSACTION BASED ON BRAND INDIFFERENCE	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	11686077	20070156529	METHOD AND APPARATUS FOR CONDUCTING A TRANSACTION BASED ON BRAND INDIFFERENCE	Abandoned Inactive
US	11926769	20080052186	SYSTEM FOR UTILIZING REDEMPTION INFORMATION	Abandoned Inactive
US	11958571	20080097857	MULTIPLE PARTY REWARD SYSTEM UTILIZING SINGLE ACCOUNT	Abandoned Inactive
US	12169601		Searching And Presenting User Preferences In Social Media Networks	Abandoned Inactive
US	12955272	20110099082	PURCHASING, REDEMPTION AND SETTLEMENT SYSTEMS AND METHODS WHEREIN A BUYER TAKES POSSESSION AT A RETAILER OF A PRODUCT PURCHASED USING A COMMUNICATION NETWORK	Abandoned Inactive
US	12973947	20110093340	SYSTEM FOR PROVIDING A SERVICE TO VENUES WHERE PEOPLE PERFORM TRANSACTIONS	Abandoned Inactive
US	13411502		Relevance System For Consumer Deals	Abandoned Inactive
US	13423098	20120239484	DEAL SCORING SYSTEM AND METHOD	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	13437706	20120330771	RETAIL SYSTEM FOR SELLING PRODUCTS BASED ON A FLEXIBLE PRODUCT DESCRIPTION	Abandoned Inactive
US	13617816	20130211896	METHOD AND APPARATUS FOR IDENTIFYING POTENTIAL BUYERS	Abandoned Inactive
US	13619384	20130226726	PURCHASING, REDEMPTION AND SETTLEMENT SYSTEMS AND METHODS WHEREIN A BUYER TAKES POSSESSION AT A RETAILER OF A PRODUCT PURCHASED USING A COMMUNICATION NETWORK	Abandoned Inactive
US	13619415	20130232060	PURCHASING, REDEMPTION AND SETTLEMENT SYSTEMS AND METHODS WHEREIN A BUYER TAKES POSSESSION AT A RETAILER OF A PRODUCT PURCHASED USING A COMMUNICATION NETWORK	Abandoned Inactive
US	13619640		Searching And Presenting User Preferences In Social Media Networks	Abandoned Inactive
US	13619680		Implicitly Associating Metadata Using User Behavior	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13619715		Embedded Storefront	Abandoned Inactive
US	13619734	20130211901	MULTIPLE PARTY REWARD SYSTEM UTILIZING SINGLE ACCOUNT	Abandoned Inactive
US	13619743	20130211902	MULTIPLE PARTY REWARD SYSTEM UTILIZING SINGLE ACCOUNT	Abandoned Inactive
US	13620511		Proximity-Based User Interaction	Abandoned Inactive
US	13631313	20140095232	Scheduling Appointments With Deal Offers	Abandoned Inactive
US	13655254		Location Based Advertising Systems	Abandoned Inactive
US	13708663	20140089092	Client-Based Deal Filtering and Display	Abandoned Inactive
US	13764753	20140229375	CONSUMER DEVICE PAYMENT TOKEN MANAGEMENT	Abandoned Inactive
US	13796635		Deal Meter	Abandoned Inactive
US	13796695		Rewards Program	Abandoned Inactive
US	13801520	20140108247	Peer-To-Peer Payment Processing	Abandoned Inactive
us	13803275		Merchant Side Cross- Category Deal Diversity	Abandoned Inactive
US	13804316		Method, Apparatus, And Computer Program Product For Determining Closing Metrics	Abandoned Inactive
US	13830243	20140279058	CAPACITY CALCULATOR	Abandoned Inactive
US	13839142		Throttling System For Consumer Deals	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	13839786		Promotion Suppression System	Abandoned Inactive
US	13839958		Inbox Management System	Abandoned Inactive
US	13842467		Reservation System	Abandoned Inactive
US	13927742	20150019287	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING MOBILE LOCATION BASED SALES LEAD IDENTIFICATION	Abandoned Inactive
US	13930732		Systems And Methods For Consumer Defined Promotion Bundling	Abandoned Inactive
US	14039453		Facilitating Reward Program For Consumer Transactions And Redemptions Of Deal Offers	Abandoned Inactive
US	14055081	20140278856	METHOD AND APPARATUS FOR ADMINISTERING A REWARD PROGRAM	Abandoned Inactive
US	14103093		System, Apparatus, Method, And User Interface Configured For The Instant Sharing Of A Promotion	Abandoned Inactive
US	14196117		Unlocking Editorial Content	Abandoned Inactive
US	14212511	20150262225	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CALCULATING PROFIT FOR A PROMOTION AND	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			MARKETING SERVICE	
US	14446083		Sourcing Goods Based On Predictive Modeling	Abandoned Inactive
US	14446088		Sourcing Goods Based On Pre-Feature Analytics	Abandoned Inactive
US	14453913	20150213546	LEARNING USER INTERFACE	Abandoned Inactive
US	14454695	20150269557	Consumer Device Based Point-Of-Sale	Abandoned Inactive
US	14466816		Systems And Methods For Providing Group Promotions	Abandoned Inactive
US	14479250		Method And Apparatus For Providing Promotion Recommendations	Abandoned Inactive
US	14479260		Method And Apparatus For Providing Promotion Recommendations	Abandoned Inactive
US	14527189	20150127435	SYSTEM AND METHODS FOR DISCOUNT RETAILING	Abandoned Inactive
US	14565534		Method, Apparatus, And Computer Program Product For Providing Management Of Sales Proposals	Abandoned Inactive
US	14567524		Method And Apparatus For Evaluating Electronic Marketing Communications	Abandoned Inactive
US	14582595	20150142549	MULTIPLE PARTY REWARD SYSTEM UTILIZING SINGLE ACCOUNT	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	14670558		Method, Apparatus, And Computer Program Product For Using External Consumer Data To Assist In Determining Relevance For Promotions	Abandoned Inactive
US	14675125		Time-Adjusted Dynamic Promotion Analytics	Abandoned Inactive
US	14693725		Generating In-Channel and Cross-Channel Promotion Recommendations Using Promotion Similarity	Abandoned Inactive
US	14719993		Method And System For Providing Impressions Of Promotions Based On Sufficiency Of Promotion Data	Abandoned Inactive
US	14751648		Apparatus, System, And Method For Outputting Promotions	Abandoned Inactive
US	14755742		Method, Apparatus, And Computer Program Product For Facilitating Dynamic Change Of An Adjustable Component Of A Data Set	Abandoned Inactive
US	14824934		Personalization Of Ranked Relevance Results Returned From A Universal Relevance Service Framework	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	14833815	20160125492	PURCHASING, REDEMPTION AND SETTLEMENT SYSTEMS AND METHODS WHEREIN A BUYER TAKES POSSESSION AT A RETAILER OF A PRODUCT PURCHASED USING A COMMUNICATION NETWORK	Abandoned Inactive
US	14843048		Method And Apparatus For Managing Item Inventories	Abandoned Inactive
US	14843327	20150379545	CAPACITY CALCULATOR	Abandoned Inactive
US	14865157		Method And Apparatus For Configuring A Merchant Device Based On Business Analytic Data	Abandoned Inactive
US	14865214		Method And Apparatus For Providing Merchant Decision-Making Support Based On A Demand Model	Abandoned Inactive
US	14869530		System And Method For Detecting Consumer Hot-Spots Based On Geographic Zone Information	Abandoned Inactive
US	14869542		System And Method For Generating Geographic Zone Information For Commercial Entities	Abandoned Inactive
US	14885611		Purchasing, Redemption, And Settlement Systems And Methods Wherein A Buyer Takes Possession	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			At A Retailer Of A Product Purchased Using A Communication Network	
US	14980627		Dynamic Data-Driven Generation Of Customized Incentives	Abandoned Inactive
US	15054765		Method, Apparatus, And Computer Program Product For Facilitating The Management And Application Of Price Changes	Abandoned Inactive
US	15383921	20170193503	Gift Card Transfer Security	Abandoned Inactive
us	15394380		Ingestion Server For Parsing Data Objects	Abandoned Inactive
US	15395253		Limiting Gender Inappropriate Object Results And Boosting Perishable Object Results Of Ranked Relevance Results Returned From A Universal Relevance Service Framework	Abandoned Inactive
US	15847482	20180174189	METHODS AND SYSTEMS FOR DETECTING GEOGRAPHIC AREAS HAVING ELEVATED SUPPLY AND DEMAND LEVELS	Abandoned Inactive
US	16192899		System For Utilizing Redemption Information	Abandoned Inactive
US	16448309		Method and Apparatus for Generating an Electronic Communication	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	16456113		Facilitating Consumer Payments And Redemptions Of Deal Offers	Abandoned Inactive
US	16542361		Method And Apparatus For Generating An Electronic Communication	Abandoned Inactive
US	16660047		Automated Deal Guide Optimization	Abandoned Inactive
US	16820012		Method, Apparatus, And Computer Program Product For Calculating Profit For A Promotion And Marketing Service	Abandoned Inactive
US	16859466		Systems And Methods For Consumer Defined Promotion Bundling	Abandoned Inactive
US	16859612		Method, Apparatus, And Computer Program Product For Classifying User Search Data	Abandoned Inactive
US	16860759		Method, Apparatus, And Computer Program Product For Lead Assignment	Abandoned Inactive
US	16872495		Method, Apparatus, And Computer Program Product For Providing A Dashboard	Abandoned Inactive
US	16898568		Method, Apparatus, And Computer Program Product For Sales Pipeline Automation	Abandoned Inactive
US	16989351		Method, Apparatus, And Computer Program Product	Abandoned Inactive
US	17018661		Purchasing, Redemption And Settlement Systems And Methods Wherein A Buyer Takes Possession At A	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Retailer Of A Product Purchased Using A Communication Network	
US	17148794	20210272146	YIELD MANAGEMENT THROUGH THE CLASSIFICATION OF RENDERABLE DATA OBJECTS	Abandoned Inactive
US	17167530		Learning User Interface	Abandoned Inactive
US	17171770	20210271721	GENERATING AND PRESENTING TARGETED ADVERTISEMENTS INCLUDING REPRESENTATIONS OF SUBJECT INDIVIDUALS	Abandoned Inactive
US	17647751	20220245665	MODIFICATION OF ELECTRONIC CONTENT IDENTIFIED BY A TRANSMISSION OF AN INDICATION OF THE ONLINE CONTENT AFTER THE TRANSMISSION	Abandoned Inactive
US	17734269	20220261410	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR RANKING CONTENT CHANNELS	Abandoned Inactive
US	18327672		Method, Apparatus, And Computer Program Produ ct For Machine Learning Model Lifecycle Manage ment	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	18327744		Generic Message Injection System	Abandoned Inactive
US	09427163			Abandoned Inactive
US	09441978			Abandoned Inactive
US	10037143	7318041	Multiple party reward system utilizing single account	Expired Inactive
US	10244262	6985879	Systems and methods for facilitating group rewards	Expired Inactive
us	11424294	8010417	System and process for local acquisition of products priced online	Expired Inactive
US	11426786	7689468	Purchasing, redemption and settlement systems and methods wherein a buyer takes possession at a retailer of a product purchased using a communication network	Expired Inactive
US	11746714	8150735	Retail system for selling products based on a flexible product description	Expired Inactive
US	11930893	7860753	Purchasing, redemption, and settlement systems and methods wherein a buyer takes possession at a retailer of a product purchased using a communication network	Expired Inactive
US	11946435	8280769	Method and apparatus for administering a reward program	Expired Inactive
US	12111716	8271327	Method and apparatus for identifying potential buyers	Expired Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	13616662	8566155	Method and apparatus for administering a reward program	Expired Inactive
US	13619579	8799100	Retail system for selling products based on a flexible product description	Expired Inactive
US	13620719	10169791	System for utilizing redemption information	Expired Inactive
US	13620726	10235702	System for utilizing redemption information	Expired Inactive
US	14315026	9684916	Retail system for selling products based on a flexible product description	Expired Inactive
US	14930042	9754302	Retail system for selling products based on a flexible product description	Expired Inactive
US	08889503	6249772	Systems and methods wherein a buyer purchases a product at a first price and acquires the product from a merchant that offers the product for sale at a second price	Expired Inactive
US	08948144	6128599	Method and apparatus for processing customized group reward offers	Expired Inactive
US	08961964	6049778	Method and apparatus for administering a reward program	Expired Inactive
US	09223900	6327573	Multiple party reward system utilizing single account	Expired Inactive
us	09337906	6754636	Purchasing systems and methods wherein a buyer takes possession at a retailer of a product	Expired Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			purchased using a communication network	
US	09348566	7039603	Settlement systems and methods wherein a buyer takes possession at a retailer of a product purchased using a communication network	Expired Inactive
US	09376884	6269343	On-line marketing system and method	Expired Inactive
US	09412930	6970837	Methods and apparatus wherein a buyer arranges to purchase a first product using a communication network and subsequently takes possession of a substitute product at a retailer	Expired Inactive
US	09540035	7711604	Retail system for selling products based on a flexible product description	Expired Inactive
US	09591594	7107228	Systems and methods wherein a buyer purchases a product at a first price and physically acquires the product at a location associated with a merchant that offers the product for sale at a second price	Expired Inactive
AU	2016271110	2016271110	Mobile search	Granted Active
AU	2017331599	2017331599	Mobile service applications	Granted Active

Country	Application No.	Patent No./ Publication No.	Title	Status
CA	2917014	2917014	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING MOBILE LOCATION BASED SALES LEAD IDENTIFICATION	Granted Active
CA	2937983	2937983	LEARNING USER INTERFACE	Granted Active
CA	2940104	2940104	METHOD AND SYSTEM FOR ADJUSTING ITEM RELEVANCE BASED ON CONSUMER INTERACTIONS	Granted Active
CN	201480020605	105229683	consumer device payment token management	Granted Active
JP	2012211434	05919154	Visit fee-charging type	Granted Active
ЕР	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
AU	2017381768	2017381768	Methods and systems for detecting geographic areas having elevated supply and demand levels	Abandoned Inactive
AU	2017383460	2017383460	GPS determined location based access to linked information and delivery thereof	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
AU	2019299459	2019299459	Method, system, and apparatus for rapid geographic search in an actor-based geographic search network	Abandoned Inactive
AU	2022203035	2022203035	Mobile chat application integration with promotional systems	Pending Active
CA	2903329	2903329	CONSUMER DEVICE PAYMENT TOKEN MANAGEMENT	Pending Active
CA	2957795	2957795	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Abandoned Inactive
CA	2959292	2959292	METHOD AND APPARATUS FOR ELECTRONIC TRANSACTIONS BASED ON A REPLY MESSAGE	Abandoned Inactive
CA	2986918	2986918	MOBILE SEARCH	Granted Active
CA	2990409	2990409	MOBILE CHAT APPLICATION INTEGRATION WITH PROMOTIONAL SYSTEMS	Pending Active
CA	3037830	3037830	MOBILE SERVICE APPLICATIONS	Pending Active
CA	3047374	3047374	METHODS AND SYSTEMS FOR DETECTING GEOGRAPHIC AREAS HAVING ELEVATED SUPPLY	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			AND DEMAND LEVELS	
CA	3047377	3047377	GPS DETERMINED LOCATION BASED ACCESS TO LINKED INFORMATION AND DELIVERY THEREOF	Pending Active
CA	3094965	3094965	METHOD AND SYSTEM FOR ADJUSTING ITEM RELEVANCE BASED ON CONSUMER INTERACTIONS	Pending Active
CA	3105718	3105718	METHOD, SYSTEM, AND APPARATUS FOR RAPID GEOGRAPHIC SEARCH IN AN ACTOR-BASED GEOGRAPHIC SEARCH NETWORK	Abandoned Inactive
EP	2016815327	3314563	MOBILE CHAT APPLICATION INTEGRATION WITH PROMOTIONAL SYSTEMS	Pending Active
EP	2017852524	3516503	MOBILE SERVICE APPLICATIONS	Pending Active
EP	2017829310	3555834	METHODS AND SYSTEMS FOR DETECTING GEOGRAPHIC AREAS HAVING ELEVATED SUPPLY AND DEMAND LEVELS	Abandoned Inactive
EP	2017829709	3555835	GPS DETERMINED LOCATION BASED ACCESS TO LINKED INFORMATION AND DELIVERY THEREOF	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
EP	2019830713	3818436	METHOD, SYSTEM, AND APPARATUS FOR RAPID GEOGRAPHIC SEARCH IN AN ACTOR-BASED GEOGRAPHIC SEARCH NETWORK	Abandoned Inactive
AU	199882901	199882901	System and process for local acquisition of products priced online	Abandoned Inactive
AU	2014214650	2014214650	Consumer device payment token management	Abandoned Inactive
AU	2015308074	2015308074	Method and apparatus for electronic transactions based on a reply message	Abandoned Inactive
AU	2016281676	2016281676	Mobile chat application integration with promotional systems	Abandoned Inactive
AU	2018260974	2018260974	Method and apparatus for electronic transactions based on a reply message	Abandoned Inactive
ΑU	2020200206	2020200206	Consumer device payment token management	Abandoned Inactive
AU	2020267155	2020267155	Method and apparatus for electronic transactions based on a reply message	Abandoned Inactive
AU	200234370	775975	System and process for local acquisition of products priced online	Abandoned Inactive
EP	1998933186	1010124	SYSTEM AND PROCESS FOR LOCAL ACQUISITION OF PRODUCTS PRICED ONLINE	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
EP	2012752561	2681706	SYSTEM AND METHODS FOR PROVIDING LOCATION BASED DISCOUNT RETAILING	Abandoned Inactive
EP	2013739541	2867840	INBOX MANAGEMENT	Abandoned Inactive
EP	2013828096	2883198	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR RANKING CONTENT CHANNELS	Abandoned Inactive
EP	2013846999	2909799	CONSUMER PRESENCE BASED DEAL OFFERS	Abandoned Inactive
EP	2014748691	2954474	CONSUMER DEVICE PAYMENT TOKEN MANAGEMENT	Abandoned Inactive
EP	2014778607	2973322	CONSUMER DEVICE BASED POINT-OF- SALE	Abandoned Inactive
EP	2014818658	3014535	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING MOBILE LOCATION BASED SALES LEAD IDENTIFICATION	Abandoned Inactive
F/P	2015739857	3100150	LEARNING USER INTERFACE	Abandoned Inactive
EP	2015751378	3108433	METHOD AND SYSTEM FOR ADJUSTING ITEM RELEVANCE BASED ON CONSUMER INTERACTIONS	Abandoned Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
EP	2015835367	3186764	METHOD AND APPARATUS FOR ELECTRONIC TRANSACTIONS BASED ON A REPLY MESSAGE	Abandoned Inactive
EP	2016804078	3304280	MOBILE SEARCH	Abandoned Inactive
IN	2008KN3670	3670/KOLNP/200 8	PAY-FOR-VISIT ADVERTISING BASED ON VISITS TO PHYSICAL LOCATIONS	Abandoned Inactive
JP	1999508820	2000514945		Abandoned Inactive
r	2000519386	2001522102		Abandoned Inactive
JP	2004111995	2004246918	SYSTEM AND PROCESSING METHOD FOR LOCALLY OBTAINING PRODUCTS WHOSE PRICE WAS SET ON- LINE	Abandoned Inactive
KR	20087021969	2009015887	Pay-for-visit advertising based on visits to physical locations	Abandoned Inactive
KR	2013121355	2013138707	POINT OF SALES SYSTEM AND METHOD FOR POINT OF SALES PAYMENT SERVICE	Abandoned Inactive
РСТ	1998US13977	1999003056	SYSTEM AND PROCESS FOR LOCAL ACQUISITION OF PRODUCTS PRICED ONLINE	Expired Inactive
PCT	1998US22922	1999023596	METHOD AND APPARATUS FOR	Expired Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			ADMINISTERING A REWARD PROGRAM	
PCT	2000US12640	2000079410	PURCHASING SYSTEMS AND METHODS WHEREIN A BUYER TAKES POSSESSION AT A RETAILER OF A PRODUCT PURCHASED USING A COMMUNICATION NETWORK	Expired Inactive
PCT	2000US17000	2000079416	METHODS AND APPARATUS WHEREIN A BUYER ARRANGES TO PURCHASE A FIRST PRODUCT USING A COMMUNICATION NETWORK AND SUBSEQUENTLY TAKES POSSESION OF A SUBSTITUTE PRODUCT AT A RETAILER	Expired Inactive
PCT	2000US16983	2000079458	SETTLEMENT SYSTEMS AND METHODS WHEREIN A BUYER TAKES POSSESSION AT A RETAILER OF A PRODUCT PURCHASED USING A COMMUNICATION NETWORK	Expired Inactive
PCT	2000US30115	2001037164	RETAIL SYSTEM FOR SELLING PRODUCTS BASED ON A FLEXIBLE PRODUCT DESCRIPTION	Expired Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
PCT	2000US30625	2001050301	SYSTEM TO ESTABLISH A CUSTOMER- SPECIFIED PRICE OF A PRODUCT AND TO MANAGE REDEMPTION OF THE PRODUCT AT THE ESTABLISHED PRICE	Expired Inactive
PCT	2001US5829	2001063459	SYSTEM FOR UTILIZING REDEMPTION INFORMATION	Expired Inactive
PCT	2007US61328	2007090133	SYSTEM FOR PROVIDING A SERVICE TO VENUES WHERE PEOPLE AGGREGATE	Expired Inactive
PCT	2011US63823	2012078810	METHOD AND SYSTEM FOR CREDIT CARD HOLDER IDENTIFICATION	Expired Inactive
PCT	2012US27616	2012119130	SYSTEM AND METHODS FOR PROVIDING LOCATION BASED DISCOUNT RETAILING	Expired Inactive
PCT	2012US39718	2012166660	COMPUTING EARLY ADOPTERS AND POTENTIAL INFLUENCERS USING TRANSACTIONAL DATA AND NETWORK ANALYSIS	Expired Inactive
PCT	2013US48154	2014004810	INBOX MANAGEMENT	Expired Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
PCT	2013US53963	2014025898	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR RANKING CONTENT CHANNELS	Expired Inactive
PET	2013US54714	2014028478	METHOD AND APPARATUS FOR PAYMENT, RETURN ON INVESTMENT, AND IMPACT REPORTING	Expired Inactive
РСТ	2013US62389	2014052882	ONLINE ORDERING FOR IN-SHOP SERVICE	Expired Inactive
PCT	2013US33145	2014062229	PEER-TO-PEER PAYMENT PROCESSING	Expired Inactive
PCT	2013US33169	2014062230	CONSUMER PRESENCE BASED DEAL OFFERS	Expired Inactive
PCT	2014US15630	2014124395	CONSUMER DEVICE PAYMENT TOKEN MANAGEMENT	Expired Inactive
PCT	2014US20028	2014158769	CAPACITY CALCULATOR	Expired Inactive
PCT	2014US21387	2014164228	CONSUMER DEVICE BASED POINT-OF- SALE	Expired Inactive
PCT	2014US44067	2014210137	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING MOBILE LOCATION BASED SALES LEAD IDENTIFICATION	Expired Inactive
PCT	2014US57762	2015048476	SYSTEMS AND METHODS FOR PROVIDING CONSUMER FACING	Expired Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			POINT-OF-SALE INTERFACES	
PCT	2015US13084	2015113045	LEARNING USER INTERFACE	Expired Inactive
PCT	2015US16820	2015127204	METHOD AND SYSTEM FOR ADJUSTING ITEM RELEVANCE BASED ON CONSUMER INTERACTIONS	Expired Inactive
PCT	2015IB56120	2016024226	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Expired Inactive
PGT	2015IB56479	2016030846	METHOD AND APPARATUS FOR ELECTRONIC TRANSACTIONS BASED ON A REPLY MESSAGE	Expired Inactive
РСТ	2016US34469	2016196227	MOBILE SEARCH	Expired Inactive
PCT	2016US39069	2016210164	MOBILE CHAT APPLICATION INTEGRATION WITH PROMOTIONAL SYSTEMS	Expired Inactive
РСТ	2017IB55785	2018055580	MOBILE SERVICE APPLICATIONS	Expired Inactive
PCT	2017IB58149	2018116171	METHODS AND SYSTEMS FOR DETECTING GEOGRAPHIC AREAS HAVING ELEVATED SUPPLY	Expired Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			AND DEMAND LEVELS	
PCT	2017IB58178	2018116184	GPS DETERMINED LOCATION BASED ACCESS TO LINKED INFORMATION AND DELIVERY THEREOF	Expired Inactive
PCT	2018US67185	2019133501	METHODS AND SYSTEMS FOR GENERATING A SUPPLY INDEX INDICATIVE OF A QUALITY OF AVAILABLE SUPPLY	Expired Inactive
PCT	2019US40403	2020010145	METHOD, SYSTEM, AND APPARATUS FOR RAPID GEOGRAPHIC SEARCH IN AN ACTOR-BASED GEOGRAPHIC SEARCH NETWORK	Expired Inactive
US	18336187		Booking Availability Engine	Abandoned Inactive
US	18364095		Apparatus, System, And Method For Providing Simultaneous Delivery Of Output Communications	Pending Active
US	18458493		Probabilistic Inventory Management	Abandoned Inactive
US	18512533		MOBILE PROXIMITY BASED MESSAGES	Pending Active
US	18336210		Collaborative Editing Service	Abandoned Inactive
US	18337523		Generating Optimized In-Channel And Cross- Channel Promotion Recommendations	Abandoned Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			Using Free Shipping Qualifier	
US	18461403		Method, Apparatus And Computer Program Product For Improving Dynamic Retry Of Resource Service	Pending Active
US	18463143		Graph-Based Compression Of Data Records	Pending Active
US	18483244		GPS DETERMINDED LOCATION BASED ACCESS TO LINKED INFORMATION AND DELIVERY THEREOF	Pending Active
US	18490026		SERVER FOR INGESTING AND UPDATING RENDERABLE DATA OBJECTS FROM A FLAT FILE SERVER	Pending Active
US	18490543		METHOD AND APPARATUS FOR PROVIDING ELECTRONIC COMMUNICATIONS	Pending Active
US	18497178		SYSTEM AND METHOD FOR GENERATING PURCHASE RECOMMENDATION S BASED ON GEOGRAPHIC ZONE INFORMATION	Pending Active
US	18500456		SYSTEMS AND METHODS FOR PROVIDING CONSUMER FACING POINT-OF-SALE INTERFACES	Pending Active

Country	Application No.	Patent No./ Publication No.	Title	Status
US	18502356		FACILITATING ONLINE TRANSACTIONS	Pending Active
US	18503826		INTERACTIVE VIRTUAL REALITY SYSTEM	Pending Active
US	18511770		METHOD, SYSTEM, AND APPARATUS FOR PROGRAMMATICAL LY GENERATING A CHANNEL INCREMENTALITY RATIO	Pending Active
US	18512960		LEARNING USER INTERFACE	Pending Active
BE	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
FR	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
DE	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA	Lapsed Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			TRANSCEIVERS TO A DISPLAY	
Æ	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
NL	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
GB	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
PL	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT	Lapsed Inactive

Country	Application No.	Patent No./ Publication No.		Status
			FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	
ES	2015763415	3180688	METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY	Lapsed Inactive
US	60823573		System For Providing A Service To Venues Where People Aggregate	Provisional Inactive
US	61313132		System For Providing Service To Venues Where People Perform Transactions	Provisional Inactive
US	61399104		System and Method for Incentives	Provisional Inactive
US	61453855		Deal Scoring System And Method	Provisional Inactive
US	61460325		System and Method for Incentives	Provisional Inactive
US	61518232		System and Method for Incentives	Provisional Inactive
US	61518937		Method And Apparatus For Providing Content To Users Based On Web Pages They And Others Visit	Provisional Inactive
US	61587516		Email Suggestor System	Provisional Inactive
US	61590733		System For Enbedding Real-Time Demographics Into Local Business Listings	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	61591777		Transaction Processing System	Provisional Inactive
US	61618338		Generating Deal Offers And Providing Analytics Data	Provisional Inactive
US	61622991		System, Method, And Computer Program Product For High-Speed Soft Geo-Coding On Electronic Documents	Provisional Inactive
US	61623472		Rewards Program	Provisional Inactive
US	61639067		Deal Meter	Provisional Inactive
US	61640647		Deal Generation Using Point-Of-Sale Systems And Related Methods	Provisional Inactive
US	61661291		Facilitating Consumer Payments And Redemptions Of Deal Offers	Provisional Inactive
US	61664919		System And Method For Controlling A Data Integration Process	Provisional Inactive
US	61665213		Method And Apparatus For Creating Web Content And Identifying Advertisements For Users Creating And Viewing Content	Provisional Inactive
US	61680607		Method, Apparatus, And Computer Program Product For Identifying A Home Channel Page While Accessing A Promotional System	Provisional Inactive
US	61682602		Incentivized Sharing In Social Networks	Provisional Inactive
US	61682762		Unified Payment And Return On Investment System	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	61683803		System, Method, And Computer Program Product For Flexible High-Speed Indexing And Retrieval Of Geolocated Content	Provisional Inactive
US	61683807		System, Method, And Computer Program Product For Classification Of Documents In Place Hierarchy	Provisional Inactive
US	61683969		System, Method, And Computer Program Product For Ranking Web Content Based On Local Interest	Provisional Inactive
US	61683972		System, Method, And Computer Program Product For Creating Optimal Thumbnails For Web Documents	Provisional Inactive
US	61695857		Promotion Offering System	Provisional Inactive
US	61698434		Promotion Searching System	Provisional Inactive
US	61702431		Consumer Cross- Category Deal Diversity	Provisional Inactive
US	61706664		Online Ordering For In- Shop Service	Provisional Inactive
US	61707055		Getaways Systems	Provisional Inactive
US	61707664		Facilitating Reward Program For Consumer Transactions And Redemptions Of Deal Offers	Provisional Inactive
US	61707781		Deal Program Life Cycle	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	61709623		Merchant Side Cross- Category Deal Diversity	Provisional Inactive
US	61715229		Peer-To-Peer Payment Processing	Provisional Inactive
US	61715230		Consumer Presence Based Deal Offers	Provisional Inactive
US	61715765		Facilitating Reward Program For Consumer Transactions And Redemptions Of Deal Offers	Provisional Inactive
US	61730046		Method And Apparatus For Matching Subscriber Demand With Merchant/Inventory Supply	Provisional Inactive
US	61770174		Method For Determining Provider Parameters Including A Provider Margin	Provisional Inactive
US	61780006		Incentivized Sharing In Social Networks	Provisional Inactive
US	61824850		Unified Payment And Return On Investment System	Provisional Inactive
US	61832467		Method, Apparatus, And Computer Program Product For Facilitating Dynamic Pricing	Provisional Inactive
US	61835148		Non-Promotion Content Determination System	Provisional Inactive
US	61840829		Booking Availability Engine	Provisional Inactive
US	61840856		Merchant Booking Availability Engine	Provisional Inactive
US	61840867		Consumer Booking Availability Engine	Provisional Inactive
US	61840874		Method, Apparatus, System, And Computer	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Program Product For Selecting An Image Associated With A Promotion	
US	61840939		Interactive Personalized Graphical Feedback Overlay	Provisional Inactive
US	61860219		Sourcing Goods Based On Pre-Feature Analytics	Provisional Inactive
US	61861914		Sourcing Goods Based On Predictive Modeling	Provisional Inactive
US	61865541		Incentivized Sharing In Social Networks	Provisional Inactive
US	61866026		Configuring Promotions For Local Pickup Of Goods	Provisional Inactive
US	61869033		Systems And Methods For Providing Group Promotions	Provisional Inactive
US	61872550		Systems And Methods For Providing Promotions Based On Search Queries	Provisional Inactive
US	61872574		Systems And Methods For Providing Diversified Promotional Messages	Provisional Inactive
US	61883316		Method, Apparatus, And Computer Program Product For Auto- Replenishing An Inventory Of Promotions	Provisional Inactive
US	61883414		Contractor Point Of Sale System	Provisional Inactive
US	61883517		Systems And Methods For Providing Streamlined multiple Item Transactions	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	61883525		Systems And Methods For Providing Multiple Items To Consumers	Provisional Inactive
US	61883846		Systems And Methods For Programatically Grouping Consumers	Provisional Inactive
US	61883913		Systems And Methods For Providing Shared Promotion Redemptions	Provisional Inactive
US	61908599		Predictive Recommendation System Using Contextual Relevance	Provisional Inactive
us	61910926		Method And Apparatus For Providing Promotion Vouchers	Provisional Inactive
US	61913801		Systems And Methods for Providing Group Promotions	Provisional Inactive
US	61914552		Method And Apparatus For Evaluating Electronic Communications	Provisional Inactive
US	61916065		Systems, Apparatus, And Methods For Providing Local Promotions	Provisional Inactive
US	61916066		Systems, Apparatus, And Methods For Providing Merchant- Defined Local Promotions	Provisional Inactive
US	61916067		Systems, Apparatus, And Methods For Providing Promotion Newsfeeds	Provisional Inactive
US	61917247		Method And System For Recommending Promotions To Consumers	Provisional Inactive
US	61918261		Unlocking Editorial Content	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	61918321		Method, Apparatus, And Computer Program Product For Providing Management Of Sales Proposals	Provisional Inactive
US	61918576		Method And System For Providing Impressions For A Promotion And Marketing Service	Provisional Inactive
US	61919205		System For Predicting Consumer Purchasing Of Promotions	Provisional Inactive
US	61919288		System, Apparatus, And Method For Page Composition	Provisional Inactive
US	61919641		Systems, Apparatus, And Methods For Providing Promotions Based On Consumer Interactions	Provisional Inactive
US	61920247		Automatic Selection OF High Quality Training Data Using An Adaptive Crowd- Trained Learning Framework	Provisional Inactive
US	61920251		Processing Dynamic Data Using An Adaptive Crowd- Trained Learning System	Provisional Inactive
US	61921310		Method And System for Providing Impressions Using Absolute Relevance	Provisional Inactive
US	61932046		Living User Interface	Provisional Inactive
US	61939193		Method, Apparatus, And Computer Program Product For Forecasting Demand	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	61943242		Mobile Device Consumer Interactions	Provisional Inactive
US	61943619		Method, Apparatus, And Computer Program Product For Providing Management Of Sales Proposals	Provisional Inactive
US	61943737		Method, Apparatus, and Computer Program Product For Searching For Promotions	Provisional Inactive
US	61943961		Consumer Device Presence-Based Transaction Session	Provisional Inactive
US	61944262		Method, Apparatus, And Computer Readable Medium For Group Gifting In A Randomized Format	Provisional Inactive
US	61948496		Systems And Methods For Providing Group Promotions	Provisional Inactive
US	61971735		Method, Apparatus, And Computer Program Product For Using External Consumer Data To Assist In Determining Relevance For Promotions	Provisional Inactive
US	61972049		Forecasting Demand Using Hierarchical Temporal Memory	Provisional Inactive
US	61973815		Time-Adjusted Dynamic Promotion Analytics	Provisional Inactive
US	61982834		Systems And Methods For Providing Related Promotions	Provisional Inactive
US	61989918		Method, Apparatus, and Computer Readable Medium For Providing	Provisional Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
			Stored Balance Card Information	
US	61989960		Generating In-Channel and Cross-Channel Promotion Recommendations Using Promotion Similarity	Provisional Inactive
US	61989968		Generating In-Channel And Cross-Channel Promotion Recommendations Using Promotion Cross- Sell	Provisional Inactive
US	61989977		Generating Optimized In-Channel And Cross- Channel Promotion Recommendations Using Free Shipping Qualifier	Provisional Inactive
US	61993982		Real-Time Predictive Recommendation System Using Per-Set Optimization	Provisional Inactive
US	62121272		Method, Apparatus, And Computer Program Product For Facilitating The Management And Application Of Price Changes	Provisional Inactive
US	62135005		Automatic Entity Resolution Data Cleaning	Provisional Inactive
US	62140025		Apparatus And Method For Enhanced Message Targeting	Provisional Inactive
us	62140030		Apparatus And Method For Enhanced Message Targeting	Provisional Inactive
US	62140957		Universal Relevance Service Framework	Provisional Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	62141036		Probabilistic Inventory Management	Provisional Inactive
US	62141047		Electronic Travel Planner	Provisional Inactive
US	62141063		Ranked Relevance Results Using Multi- Featured Scoring Returned From A Universal Relevance Service Framework	Provisional Inactive
US	62141075		Enforcing Diversity In Ranked Relevance Results Returned From A Universal Relevance Service Framework	Provisional Inactive
US	62141078		Personalization Of Ranked Relevance Results Returned From A Universal Relevance Service Framework	Provisional Inactive
US	62155753		Apparatus, Method, and Computer Program Product For Providing Synchronous Delivery Of Active Media And Electronic Marketing Communications	Provisional Inactive
US	62167431		Methods And Systems For Programmatic Control Of Transmitted Electronic Content	Provisional Inactive
US	62167432		Methods And Systems For Programmatic Control Of Transmitted Electronic Content	Provisional Inactive
US	62167436		Methods And Systems For Programmatic Control Of Transmitted Electronic Content	Provisional Inactive
US	62168560		Mobile Search	Provisional Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	62171565		Apparatus And Method For Utilizing Immediate Gratification Promotions	Provisional Inactive
US	62171576		Apparatus And Method For Utilizing Immediate Gratification Promotions	Provisional Inactive
US	62171579		Apparatus And Method For Utilizing Proximity Density Mapping To Assist Relevance Determinations	Provisional Inactive
US	62017158		Graph-Based Compression of Data Records	Provisional Inactive
US	62017776		Method And System For Facilitating Consumer Interactions for Performing Purchase Commands	Provisional Inactive
US	62017781		Method And System For A Predefined Suite Of Consumer Interactions Initiating Execution Of Commands	Provisional Inactive
US	62017783		Method And System For Facilitating Consumer Interactions With Promotions	Provisional Inactive
US	62017787		Method And System For Defining Consumer Interactions For Initiating Execution Of Commands	Provisional Inactive
US	62017793		Method And System For Use Of Biometric Information Associated With Consumer Interactions	Provisional Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	62017795		Method And System For Adjusting Item Relevance Based On Consumer Interactions	Provisional Inactive
US	62017903		Method, Apparatus, And Computer Program Product For Outputting Promotions	Provisional Inactive
US	62183966		Apparatus, System, And Method For Providing Simultaneous Delivery Of Output Communications	Provisional Inactive
US	62184120		Mobile Proximity Based Messages	Provisional Inactive
US	62018456		Method And System For Programmatic Generation Of Survey Queries	Provisional Inactive
US	62185101		Method, Apparatus, And Computer Program Product For Merchant Classification	Provisional Inactive
US	62185364		Hybrid Data Integration Platform	Provisional Inactive
US	62185421		Mobile Chat Application Integration With Promotional Systems	Provisional Inactive
US	62186300		Wearable Device That Is Automatically Configurable Between Wearer Facing And Redemption Interfaces	Provisional Inactive
US	62186541		Method, Apparatus, And Computer Program Product For Offering And Processing Promotions	Provisional Inactive
US	62186826		Method, Apparatus, And Computer Program Product For Facilitating	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			The Playback Of Interface Events	
US	62019211		Systems, Apparatus, And Methods Of Programmatically Determining Unique Contacts Based On Crowdsourced Error Correction	Provisional Inactive
US	62019214		Systems and Methods For Providing Dimensional Promotional Offers	Provisional Inactive
US	62200906		Method, Apparatus, And Computer Program Product For Facilitating The Activation Of Promotions Using Short Codes	Provisional Inactive
US	62212758		Method, Apparatus, And Computer Program Product For Predicting Consumer Behavior	Provisional Inactive
US	62234960		Dynamic Augmenting Relevance Rankings Using Data From External Ratings Sources	Provisional Inactive
US	62235036		Restaurant Notification Dashboard	Provisional Inactive
US	62235110		Method And Apparatus For Facilitating On- Demand Home And Auto Services	Provisional Inactive
US	62235142		Method, Apparatus, And Computer Program Product For Predicting Web Browsing Behaviors Of Consumers	Provisional Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	62235168		Mobile Device Merchant Availability Interface	Provisional Inactive
US	62235173		Optical Receipt Processing	Provisional Inactive
US	62235242		Interactive Virtual Reality System	Provisional Inactive
US	62235338		Method And Apparatus For Data Object Generation	Provisional Inactive
US	62235506		Methods And Systems For Managing Dispatch Objects	Provisional Inactive
US	62235544		Methods, Apparatuses, And Computer Program Products For Delivery Dispatcher Dashboard And Driver Chat Interfaces	Provisional Inactive
US	62235560		Methods, Apparatus, And Computer Program Products For Delivery Dispatching	Provisional Inactive
US	62238477		Method And Apparatus For Facilitating Meta Search Proxy Bidding	Provisional Inactive
US	62273569		Methods, Apparatuses, And Systems For Providing An Event Evaluation Framework	Provisional Inactive
US	62273703		Limiting Gender Inappropriate Deal Results And Boosting Perishable Deal Results Of Ranked Relevance Results Returned From A Universal Relevance Service Framework	Provisional Inactive
US	62274047		Gift Card Transfer Security	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	62274048		Dynamic Freshness for Relevance Rankings	Provisional Inactive
US	62002750		Method And System For Providing Impressions Of Promotions Based On Sufficiency Of Promotion Data	Provisional Inactive
US	62030549		Method And System For Programmatic Analysis Of Consumer Reviews	Provisional Inactive
US	62031071		Predictive Recommendation System Using Tiered Feature Data	Provisional Inactive
US	62315086		Configurable And Incremental Database Migration Framework For Heterogeneous Databases	Provisional Inactive
US	62315542		Methods And Systems For Programmatic Control Of Transmitted Electronic Content	Provisional Inactive
US	62315754		Methods And Systems For Detecting Aggregation Events	Provisional Inactive
US	62033090		System And Method For Programmatic Generation Of Attribute Descriptors	Provisional Inactive
US	62033611		Method And System For Generating Purchase Recommendations Based On Purchase Category Associations	Provisional Inactive
US	62036446		Method, Apparatus, And Computer Program Product For Controlling Content Distribution	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	62038050		Universal Relevance System	Provisional Inactive
US	62038529		Method, Apparatus, And Computer Program Product For Authenticating A Consumer For Purchase Of A Promotional Instrument	Provisional Inactive
US	62039314		Dynamically Optimizing A Data Set Distribution	Provisional Inactive
US	62398106		Mobile Service Applications	Provisional Inactive
US	62400958		Method And Apparatus For Facilitating A Response To A Metasearch Service Availability Call	Provisional Inactive
US	62040916		Computer System And Computer-Executed Method For Inventory Valuation	Provisional Inactive
US	6241962		Method And Apparatus For Electronic Transactions Based On A Reply Message	Provisional Inactive
US	62043109		Method and Apparatus For Identifying Trending Promotions	Provisional Inactive
US	62434157		Apparatus And Method For Distance-Based Option Data Object Filtering And Modification	Provisional Inactive
US	62434161		Apparatus And Method For Forecasted Performance Level Adjustment And Modification	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	62434163		Apparatus And Method For Option Data Object Performance Prediction And Modeling	Provisional Inactive
US	62436266		GPS Determined Location Based Access To Linked Information And Delivery Thereof	Provisional Inactive
US	62436270		Methods And Systems For Detecting Geographic Areas Having Elevated Supply And Demand Levels	Provisional Inactive
US	62440117		Providing Discounts To Non-Partner Merchants	Provisional Inactive
US	62440277		Method, Apparatus And Computer Program Product For System Resource Volume	Provisional Inactive
US	62440279		Method, Apparatus, And Computer Program Product For Balancing Network Resource Demand	Provisional Inactive
US	62440702		Ingestion Server For Parsing Data Objects	Provisional Inactive
US	62052726		Method And Apparatus For Automated Merchant Acquisition	Provisional Inactive
US	62531756		Method, Apparatus, And Computer Program Product For Extending An Action Vector	Provisional Inactive
US	62531766		Method, Apparatus, And Computer Program Product For Inferring Device Rendered Object Interaction Behavior	Provisional Inactive
US	62531936		Method, Apparatus, And Computer Program Product For Improving	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Network Database Functionalities	
US	62538066		System And Apparatus For Automated Evaluation Of Compatibility Of Data Structures And User Devices Based On Explicit User Feedback	Provisional Inactive
US	62538072		Structured Fine Print	Provisional Inactive
US	62547420		Method, Apparatus, And Computer Program Product For Machine Learning Model Lifecycle Management	Provisional Inactive
US	62055513		Method And Apparatus For Configuring A Merchant Device Based On Business Analytic Data	Provisional Inactive
US	62055517		Method And Apparatus For Providing Merchant Decision-Making Support Based On A Demand Model	Provisional Inactive
US	62055518		Method And Apparatus For Providing Automated Market Analysis Testing	Provisional Inactive
US	62055522		Method And Apparatus For Programmatic Promotion Generation Based On Business Analytic Data	Provisional Inactive
US	62555381		Facilitating The Application Of A Ledger To Programmatically Identify Duplicate Data Objects Indicative Of Multiple Card-Linked	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Offers Provided Against A Single Transaction Within The Ledger	
US	62555383		Yield Management Through The Classification Of Renderable Data Objects	Provisional Inactive
US	6255958		Dynamically Optimizing A Data Set Distribution	Provisional Inactive
US	6256039		Apparatus, Method, And Computer Program Product For Providing Group Rewards	Provisional Inactive
US	62056079		Methods, Apparatuses, And Computer Program Products For Providing A Platform for Negotiation and Provision of Promotions	Provisional Inactive
US	62056085		Method, Apparatus, And Computer Program Product For Providing A User Platform For A Real-Time Marketplace	Provisional Inactive
us	62057157		System And Method For Generating Geographic Zone Information For Consumers	Provisional Inactive
US	62057162		System And Method For Generating Geographic Zone Information For Commercial Entities	Provisional Inactive
US	62057168		System And Method For Generating Purchase Recommendations Based On Geographic Zone Information	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	62057172		System And Method For Detecting Consumer Hot-Spots Based On Geographic Zone Information	Provisional Inactive
US	62057176		System And Method For Detecting Commercial Hot-Spots Based On Geographic Zone Information	Provisional Inactive
US	62587881		Clustering And Coranking Of Multi- Source Location Data	Provisional Inactive
US	62599483		Method, Apparatus, And Computer Program Product For Network Data Linking And Transmission Thereof	Provisional Inactive
US	62608381		Method, System, And Apparatus For Programmatically Generating A Channel Incrementality Ratio	Provisional Inactive
US	62608409		Method, System, And Apparatus For Programmatically Determining And Adjusting Electronic Bid Values For A Digital Content Object Based On Conversion Rates	Provisional Inactive
US	62608421		Method, System, And Apparatus For Programmatically Determining And Adjusting Electronic Bid Values For A Digital Content Object	Provisional Inactive
US	62608436		Method, Apparatus, And Computer Program Product For Predictive	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
			Initial Electronic Bid Value Generation For New Digital Content Objects	
US	62608445		Method, Apparatus, And Computer Program Product For Adaptive Tail Digital Content Object Bid Value Generation	Provisional Inactive
US	62609798		Method, System, And Apparatus For Programmatically Segmenting User Profiles Based Upon Platform Activation Mechanisms	Provisional Inactive
US	62612227		Methods And Systems For Generating A Supply Index Indicative Of A Quality Of Available Supply	Provisional Inactive
US	62612234		Methods And Systems for Determining A Travel Propensity Configured For Use In The Generation OF A Supply Index Indicative Of A Quality Of Available Supply	Provisional Inactive
US	62663882		Method, Apparatus, And Computer Program Product For Predictive Dynamic Bidding Rule Generation For Digital Content Objects	Provisional Inactive
US	62067381		Method And System For Programmatic Analysis Of Consumer Sentiment With Regard To Attribute Descriptors	Provisional Inactive

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Country	Application No.	Patent No./ Publication No.	Title	Status
US	62675826		Methods And Systems For Generating A Mix- Enforced List Of Items Utilizing Maximal Marginal Relevance	Provisional Inactive
US	62682488		Method And Apparatus For Clustering Platform Sessions And User Accounts Associated With The Platform Sessions	Provisional Inactive
US	62694333		Method, System, And Apparatus For Rapid Geographic Search In An Actor-Based Geographic Search Network	Provisional Inactive
US	62069692		Curating Training Data For Incremental Re- Training Of A Predictive Model	Provisional Inactive
US	62697780		Method, Apparatus And Computer Program Product For Real-Time Circuit Breaker In Server Resource Platform	Provisional Inactive
US	62697791		Method, Apparatus And Computer Program Product For Improving Dynamic Retry Of Resource Service	Provisional Inactive
US	62729745		Systems And Methods For Optimizing A Webpage Based On Historical And Semantic Optimization Of Webpage Decision Tree Structures	Provisional Inactive
US	62752244		Machine Learning Systems Architectures For Ranking	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	62782881		Crediting Value To A Third-Party User Account Automatically Using Deep Linking	Provisional Inactive
US	62843791		Category Affinity Deal Qualifiers And Relevance Recommendations	Provisional Inactive
US	62844345		Category Affinity Deal Qualifiers And Relevance Recommendations	Provisional Inactive
us	62844522		Performing Predictive Inferences Using Multiple Predictive Models	Provisional Inactive
US	62891036		Impression Relevance Prediction And Recommendation System	Provisional Inactive
US	62897171		Merchant Incremental Electronic Impact Value Prediction And Ranking Using Multiple Machine Learning Models	Provisional Inactive
US	62901677		System For Generating And Qualifying Deal Promotions In An Internet Marketplace	Provisional Inactive
US	62091198		Method, Apparatus, And Computer Program Product For Programmatically Updating Data For Communication To A Social Network System	Provisional Inactive
US	62097023		Location Based Discovery Of Real- Time Merchant Device Activity	Provisional Inactive
US	62097536		Motion Data Based Consumer Interfaces	Provisional Inactive

Country	Application No.	Patent No./ Publication No.	Title	Status
US	62097553		Dynamic Data-Driven Generation Of Customized Incentives	Provisional Inactive
US	62097639		System And Apparatus For Self-Forming Ad- Hoc Group Promotions	Provisional Inactive
US	62097640		System And Apparatus For Automatic Review Generation	Provisional Inactive
US	62098987		Methods and Systems for Managing Transmission of Electronic Marketing Communications	Provisional Inactive
US	62099013		Prescient And Adaptive Point-Of-Sale Systems	Provisional Inactive
US	62099019		Prescient And Adaptive Point-Of-Sale Systems	Provisional Inactive
US	63120961		Ranking Of Candidate Promotions	Provisional Inactive
US	63285196		Network Transaction Data Object Transmission And Tracking System With Real-Time And Time- Delayed Quantitative Accumulation Reconciliation	Provisional Inactive
US	18525430		FACILITATING USER INTERACTIONS BASED ON PROXIMITY	Pending Active
US	18526876		SYSTEM FOR PREDICTING CONSUMER PURCHASING OF PROMOTIONS	Pending Active
US	18533584		OPTICAL RECEIPT PROCESSING	Pending Active
US	18536877		METHOD, APPARATUS, AND	Pending Active

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Country	Application No.	Patent No./ Publication No.	Title	Status
			COMPUTER PROGRAM PRODUCT FOR FACILITATING THEPLAYBACK OF INTERFACE EVENTS	
US	18543696		METHOD AND APPARATUS FOR IMPLEMENTING A SEARCH INDEX GENERATOR	Pending Active
US	62055958		Dynamically Optimizing A Data Set Distribution	Provisional Inactive
US	62056039		Apparatus, Method, And Computer Program Product For Providing Group Rewards	Provisional Inactive

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Appendix B: Form of Recordable Patent Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, Groupon, Inc. and LivingSocial, LLC, f/k/a LivingSocial, Inc., (hereinafter, collectively, "ASSIGNOR") hereby grants and assigns to Bytedance Inc. (hereinafter "ASSIGNEE") all right, title and interest in and to the patents listed in Appendix A (hereinafter, collectively, "ASSIGNED PATENTS"), to have and to hold the same, unto ASSIGNEE for its own use and enjoyment and for the use and enjoyment of its successors and assigns, including any and all past damages for infringement of any of the Assigned Patents and the sole right to sue therefore under such ASSIGNED PATENTS, for the full term or terms of all such ASSIGNED PATENTS.

ASSIGNOR represents and warrants that it has not granted and will not grant to others any rights inconsistent with the rights granted by this Patent Assignment.

ASSIGNOR authorizes and requests the Commissioner of Patent Rights and Trademarks of the United States and of all foreign countries to issue any Letters Patent granted pursuant to the Assigned Patents, to ASSIGNEE, its successors and assigns, as the assignee of the entire interest in the Assigned Patents.

IN WITNESS WHEREOF, ASSIGNOR has caused this Patent Assignment to be duly signed on its behalf.

Signature:

Date: _

Name: Title:

(,E)

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ATTESTATION OF SIGNATURE

The undersigned witnessed the signature of \(\frac{\lambda \lambda \lambda \lambda \lambda \lambda \lambda \lambda \lambda \lambda \text{LC}} \) to the above Assignment on behalf of \(\text{Groupon, Inc. and LivingSocial, LLC} \) and makes the following statements:

- 1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
- 2. IRI Poult is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on February 2(0th, 2024 to execute the above Assignment on behalf of Groupon, Inc. and LivingSocial, LLC.
- 3. VILI PONET subscribed to the above Assignment on behalf of Groupon,
 Inc. and LivingSocial, LLC.

EXECUTED on February 26th, 2024 (date)

Print Name: Sanajah Johnson

SANAJAH JOHNSON
OFFICIAL SEAL
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RECORDED: 07/08/2024

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