

## **Block coding**

### **2012-08 Encoder and Method**

#### **Granted Patents:**

[JP 6245888](#)

[KR 1687863](#)

[CN 103596008 A](#)

[TW I505694](#)

[US 9258389](#)

[US 8,675,731 B2](#)

[GB 2503295 B](#)

[RU 2 553 103 C2](#)

#### **Pending applications:**

[IN 2340/MUM/2013](#)

[BR 102013020622-9](#)

[US 2016/0156367 A1](#)

[EP 3082337 A1](#)

### **2012-08 Decoder and Method**

#### **Granted Patents:**

[GB 2505169 B](#)

[US 9538239](#)

[KR 1758954](#)

[TW 102128926](#)

[RU 2 559 691 C2](#)

#### **Allowed Applications:**

[CN 103596009 A](#)

#### **Pending applications:**

[EP 2 698 996 A2](#)

[IN 2341/MUM/2013](#)

[JP 2014-039257](#)

[BR 102013020614-8 A2](#)

[US 2017/0070752 A1](#)

## Coding methods

### 2012-10 Encoder, Decoder and Method

**Granted Patents:**

[KR 1687865](#)

[RU 2567988](#)

[TW TWI511528](#)

[US 9,245,353](#)

[GB 2507127 B](#)

**Allowed Applications:**

[CN 103780909A](#)

**Pending applications:**

[IN 3246/MUM/2013](#)

### 2013-07 Extrapolation Method

**Granted Patents:**

[GB 2516425](#)

[JP 2016-524406](#)

**Pending applications:**

[WO 2015/007389 A1](#)

[US 2016-0156933-A1](#)

[CN 105556850A](#)

[IN IN201627001416](#)

### 2013-07 Interpolation Method

**Granted Patents:**

[GB 2516426 B](#)

**Allowed Applications:**

US 2016-0142712-A1

**Pending applications:**

[WO 2015/007390 A1](#)

IN IN201627001416

RU 2016101046

KR 10-2016-7003289

[EP 3022844](#)

[CN 105794116A](#)

### 2014-06 Encoder and decoder

**Granted Patents:**

[GB 2527588](#)

RU 2639677

**Allowed Applications:**

[US 2017155404A1](#)

KR 10-2016-7036600

**Pending applications:**

[WO 2015/197201 A1](#)

[EP 3161965A0](#)

**Encoders, decoders and methods employing quantization**

**Pending applications:**

[GB 2552223](#)

[WO 2018/010852](#)

## Data reuse and dictionaries

### 2009 Image Generator

**Granted Patents:**

[FI 127117](#)

[CN 102138328 B](#)

[RU 2 493 600 C2](#)

[US 8,649,427](#)

### 2012-12 Encoder, Decoder and Method

**Granted Patents:**

[GB 2509055 B](#)

[JP 6021792](#)

[KR 1737158](#)

[TW 201433147 A](#)

[RU 2613031](#)

**Pending applications:**

[CN 103873863 A](#)

[IN 3703/MUM/2013](#)

[BR 10 2013 031748-9 A2](#)

[US 2014/0164419 A1](#)

### 2014-06 Apparatus and method for data compression

**Granted Patents:**

[GB 2527099 B](#)

**Pending applications:**

[WO 2015/188951](#)

US 15316046

[JP 2017-520839](#)

EP 3155538

### 2014-04 Deduplication method for redundant media data

**Granted Patents:**

[GB 2525448](#)

**Pending applications:**

[WO 2015/165594A1](#)

US 2017/0041021 A1

EP 3138203

**2014-06 Deduplication method for partially changed data****Granted Patents:**[GB 2527607](#)[US 9735805](#)**Allowed Applications:**[CN 106489241 A1](#)**Pending applications:**[WO 2015/197202](#)

## Entropy modifiers

### 2013-03 Entropy Modifier and method

**Granted Patents:**[GB 2511493 B](#)

RU 2611249

[JP 6073506](#)[US 8,754,791 B1](#)**Allowed Applications:**

CN 10540919A

**Pending applications:**[WO 2014/131526 A1](#)

KR 10-2015-7024996

EP 2962396

### 2013-03 Encoder, Decoder and method

**Granted Patents:**[JP 6045123](#)[US 8,810,439 B1](#)[GB 2511355 B](#)[CN 105359418 B](#)[KR 10-1610610 \(B1\)](#)[RU 2595916](#)**Pending applications:**[WO 2014/131517 A1](#)[IN 2157/MUMNP/2015](#)

EP 2962398

### 2013-03 Data Encoder, Data Decoder and method

**Granted Patents:**[JP 2016-512004](#)[US 8,823,560 B1](#)[GB 2507603 B](#)[CN 105191145 B](#)[KR 10-1610609 \(B1\)](#)**Pending applications:**[WO 2014/131527 A1](#)[IN 2155/MUMNP/2015](#)

EP 2962399

**2014-02 Encoder Apparatus, Decoder Apparatus and Method****Granted Patents:**[US 8,933,826 B2](#)**Allowed Applications:**[CN 105164923A](#)**Pending applications:**

GB 1403641.2

[WO 2014/131528 A1](#)[IN 2837/MUMNP/2015](#)

EP 2962397

**2014-07 Encoder, decoder and method****Granted Patents:**[GB 2528460](#)**Pending applications:**[WO 2016/012105 A1](#)[JP 2017-526252](#)

RU 2016152660

US 15/327357

KR 10-2017-7001810

EP 3172897

**2015-06 Encoders, Decoders and Methods utilizing Mode Symbols****Granted Patents:**[GB 2539239](#)[US 10,116,328 B2](#)**Pending applications:**[WO 2016/198169 A1](#)

RU 2017146242

KR 10-2018-7000752

EP 16729497.4

## Entropy coding information delivery

### 2014-02 Codetable delivery

**Granted Patents:**

[GB 2523348 B](#)

[JP 6195997](#)

[US 9729169](#)

[EP 3108584](#)

[KR 1737294](#)

**Pending applications:**

[WO 2015/124324 A1](#)

RU 2016130092

IN 201617031604

[CN 106170921 A](#)

### 2014-02 Delivery of range coding probabilities

**Granted Patents:**

[GB 2523347](#)

[US 10,003,356 B2](#)

[RU 2630750](#)

**Allowed Applications:**

[CN 106170922 A](#)

**Pending applications:**

[WO 2015/124323 A1](#)

KR 10-2016-7022055

[EP 3108583A1](#)

### 2015-11 Range coding with adaptive probabilities

**Allowed Applications:**

[GB 2543844](#)

**Pending applications:**

[WO 2017/071826 A1](#)

US 15/771,370

### 2015-06 Palette encoding comprising compressing the palette

**Pending applications:**

[GB 2539486](#)

[WO 2016/202469 A1](#)

US 15/736,653



## Utilization of type and format conversion

### 2014-12 Encoding or decoding image, video or audio data using data format analysis

**Granted Patents:**

[GB 2533111 B](#)

**Pending applications:**

[WO 2016/091395 A1](#)

EP 3231181

[US 2017/0332106 A1](#)

### 2014-12 Lossless encoding or decoding data incorporating a data format transformation

**Allowed Applications:**

[GB 2533109A](#)

**Pending applications:**

[WO 2016/091397 A1](#)

EP 3231180

[US 2017/0339430 A1](#)

### 2015-06 Encoding data using different palettes for different parts of the input data

**Pending applications:**

[GB 2539488](#)

[WO 2016/202470 A1](#)

[US 2018/160129 A1](#)

### 2015-09 Method of operating data memory and device utilizing method

**Granted Patents:**

[GB 2541916](#)

**Pending applications:**

[WO 2017/036606 A1](#)

US 15/756688

## Communication technologies

### 2013-04 Communication system utilizing HTTP

**Granted Patents:**[GB 2513344 B](#)[US 9787770](#)

RU 2635220

[KR 1655715](#)[EP 2989774](#)**Pending applications:**[WO 2014/173521 A1](#)[JP 2016-522478](#)[IN 2992/MUMNP/2015](#)[CN 105340242A](#)[JP 2017-118545](#)

### 2013-04 Data communication system and method

**Granted Patents:**[GB 2513345](#)[US 9413797](#)[US 8,984,158 B2](#)**Allowed Applications:**

EP 2989800

**Pending applications:**[WO 2014/173519 A1](#)[KR 20160003024\(A\)](#)[CN 105493510 A](#)

### 2015-03 Method of Communicating Data Packets within Data Communication Systems

**Granted Patents:**[GB 2536299](#)**Allowed Applications:**

KR 10-2017-7029353

**Pending applications:**[WO 2016/146269](#)[US 2018/0007108 A1](#)[EP 3269110](#)

### 2012-08 Cooperation of Device and Display

**Granted Patents:**[FI 124940 B](#)[US 9,189,429](#)**Pending applications:**[WO 2014/033369 A1](#)

EP 2 891 305

[CN 104813645 A](#)**2013-04 Server node arrangement and method****Granted Patents:**[GB 2514543](#)**Allowed Applications:**

RU 2015143011

**Pending applications:**[WO 2014/173520 A1](#)[US 2015-0036915-A1](#)[IN 3014/MUMNP/2015](#)

EP 2989789

[CN 105379261A](#)**2013-04 Communications using at least two different media types****Granted Patents:**[EP 2797279](#)[US 8,717,403](#)**Allowed Applications:**

RU 2015148738

**Pending applications:**[WO 2014/174145 A1](#)**2014-04 Additional information on a caller****Allowed Applications:**[US 2017/0048367 A1](#)**Pending applications:**[EP 2 933 987 A1](#)[WO 2015/158779 A1](#)

KR 10-2016-7028851

JP 2016-562758

CN 201580027666.9

RU 2016140625

**2017-07 Data Communication System and Method****Pending applications:**

GB 1711016.4

PCT EP2018/068335

## **Security and Secure payment solutions**

### **2014-09 Partial Data Encryption**

**Granted Patents:**

[GB 2526636](#)

**Allowed Applications:**

[CN 107078901A](#)

[EP 3195519](#)

**Pending applications:**

[WO 2016/041641 A1](#)

[JP 2017-535123](#)

[US 2017/0279604 A1](#)

### **2014-08 Integration of encoding and encryption**

**Granted Patents:**

[GB 2528959](#)

RU 2638639

[EP 3178190](#)

[KR 1737299](#)

**Allowed Applications:**

[US 2017/0237715 A1](#)

**Pending applications:**

[WO 2016/020068 A1](#)

### **2014-12 Secure Media Player**

**Pending applications:**

[GB 2533279 A](#)

[WO 2016/091394 A1](#)

[EP 3231182](#)

[US 2017/0353745 A1](#)

### **2015-04 Encryption system, encryption key wallet and method**

**Pending applications:**

[GB 2538052A](#)

[WO 2016/173724 A1](#)

[EP 3289723](#)

[US 2018/0144341 A1](#)

### **2016-04 Transaktiojärjestely**

**Allowed Applications:**[FI 20165360](#)**Pending applications:**[WO 2017/187007 A1](#)

FI 20175372

**2016-09 User Sign-In and Authentication without Passwords****Pending applications:**[GB 2554082](#)[WO 2018050293](#)**2016-12 Protecting usage of key store content****Allowed Applications:**[GB 2556638A](#)**Pending applications:**[WO 2018/099606 A1](#)**2016-12 Remote (bio-)authentication****Pending applications:**

GB 1621795.2

[WO 2018/114053 A1](#)**2017-02 Authorization Request for Payment Service****Pending applications:**[GB 2559384 A](#)[WO 2018/141488 A1](#)**Data Transfer Method****Pending applications:**

GB 1712601.2

PCT EP2018/070618

**System and Method for Creating Group Networks between Network Devices****Pending applications:**

GB 1806322.2

**Method for providing Protected Data Storage in Data memory****Pending applications:**

GB 1814149.9

## **Utilization of change detectors**

### **2004 Processing of Video Image**

**Granted Patents:**

[US 9,225,989](#)

[FI 117845 B](#)

[US 8,169,547](#)

[EP 1 787 262 B1](#)

[CN 101002232 B](#)

[RU 2 370 908 C2](#)

### **2012-05 Processing of Image**

**Granted Patents:**

[US 9,232,228](#)

[EP 2 661 081 B1](#)

### **2013-06 Processing and reproduction of frames**

**Granted Patents:**

[US 9,509,991](#)

[JP 6363181](#)

**Pending applications:**

[WO 2014/202830 A1](#)

[CN 105474644 A](#)

## **Other Technologies**

### **2009 Image Pattern Recognition**

#### **Granted Patents:**

[US 8,615,137](#)

[RU 2 487 408 C2](#)

[CN 101957918 B](#)