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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/305,958	11/29/2011	John I. Okimoto	CS38212	9414
43471	7590	10/10/2019	EXAMINER	
ARRIS Enterprises, LLC Legal Dept - Docketing 101 Tournament Drive HORSHAM, PA 19044			CHOUDHURY, AZIZUL Q	
			ART UNIT	PAPER NUMBER
			2456	
			NOTIFICATION DATE	DELIVERY MODE
			10/10/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN I. OKIMOTO, ALEXANDER MEDVINSKY, and
XIN QIU

Appeal 2018-001374
Application 13/305,958
Technology Center 2400

Before BRADLEY W. BAUMEISTER, MELISSA A. HAAPALA, and
AMBER L. HAGY, *Administrative Patent Judges*.

HAGY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–22, which are all of the pending claims. Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as ARRIS Technology, Inc. Appeal Br. 3.

CLAIMED SUBJECT MATTER

According to Appellant's Specification, the claimed invention is directed to regionalizing a digital content consumption device, such as a television set-top box. Spec. 1. In particular, the Specification describes a "digital media network" in which television sets use "digital content consumption devices" (e.g., set-top boxes) to allow conditional access to broadcast content. *See id.* The Specification further describes that access to certain content may be conditioned on the set-top box being in a particular region. *See id.* at 2–3. The conditional access is secured, for example, by use of public key encryption, in which a public key message is "customized for each region." *Id.* at 3. An updated public key may be sent to the set-top box in a public key message that contains the encrypted key as well as a region descriptor; the set-top box uses the region descriptor to determine a secret key that is then used to decrypt the encrypted key. *Id.* at 10.

Claims 1, 11, and 21 are independent. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for key-based decryption, the method comprising:

receiving, in a digital content consumption device, a public key message comprising an encrypted key;

identifying a region descriptor in the public key message;

determining a secret key based on the region descriptor;

and

decrypting the encrypted key using the secret key to produce a transmitted public key.

REFERENCES

The prior art relied upon by the Examiner is:

Gressel et al. (“Gressel”)	US 5,664,017	Sept. 2, 1997
Earnshaw	US 2007/0030967 A1	Feb. 8, 2007

REJECTION²

Claims 1–22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gressel and Earnshaw.

OPINION

The Examiner finds Gressel teaches most of the limitations of claim 1, including “identifying a region descriptor in the public key message” and “determining a secret key based on the region descriptor.” Final Act. 3 (citing Gressel, 2:18–21). The Examiner further states that “Gressel does not explicitly cite decrypting an encrypted key.” *Id.* The Examiner then finds:

In the same field of endeavor Earnshaw also teaches using a regional key (secret key derived from a regional descriptor); see paragraph 73, Earnshaw. In particular, Earnshaw [teaches] how a key (secret key) required to decrypt the control word is only available in a specified region, the control word is encrypted (encrypted key); see paragraphs 34 and 58, Earnshaw. So, a region specific key (secret key derived from region) is used to decrypt the encrypted control word (decrypt the encrypted key). By decrypting encrypted control words/keys, the system is able

² The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Because the present application was filed before March 16, 2013, the Examiner applies the pre-AIA version of the statutory basis for unpatentability.

to deliver content to its intended region and avoid viewing by unintended regions; see paragraph 33, Earnshaw.

Id. (emphasis omitted).

Appellant argues the Examiner’s findings are in error because “[t]he ‘control word’ of Earnshaw is not an equivalent of the public key, as both a public key and secret key for encryption are disclosed in Earnshaw, meaning the control word must be something different than a key.” Appeal Br. 7.

We are not persuaded of error.

Appellant has not explained why the relied-upon disclosure fails to teach or suggest the claimed feature under its broadest reasonable interpretation in light of the Specification; rather, Appellant merely alleges that the feature is different because it is described in *different terms*. *Cf. In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990) (explaining that the comparison of references to the claimed invention “is not an ‘ipsissimis verbis’ test”).

As the Examiner finds, and we agree, “Earnshaw teaches how a key (secret key) is required to decrypt the control word, [and] the control word is encrypted (encrypted key); see paragraphs 34 and 58, Earnshaw.” Ans. 3.

The Examiner further notes:

Just because Earnshaw uses the terms “key,” “public key,” and “secret key,” does not exclude “control word” from being equivalent to [*recte*: synonymous with] the appellant’s claimed “encrypted key”. Earnshaw first explains how the “control word” can be decrypted, just like the appellant’s “encrypted key”. Second, “control word” can be decrypted using a secret key, just as the “encrypted key” is (appellant is reminded that the claims do not state decryption via only a secret key). Finally, “encrypted key” and Earnshaw’s “control word” are functionally equivalent [*recte*: synonymous] (same utility) [because] both are decrypted using a “secret key” (not necessarily only a secret key).

Id. at 4.

The Examiner’s findings are supported by the cited disclosure. In particular, Earnshaw discloses a system “designed for the regional distribution of encryption (or more strictly, decryption) keys, which are intended to enable the descrambling of broadcast television or radio content from a satellite.” Earnshaw ¶ 33. Earnshaw further discloses that, “[i]n order to limit the descrambling of the service to a given region within the satellite footprint, the system makes the keys required *to decrypt the control words for the descrambling* only available in a specified region within the footprints.” *Id.* ¶ 34 (emphasis added). In other words, the control words are used for descrambling transmissions (functioning therefore as a key), and the control words are themselves encrypted for transmission using a secret key that is regionalized. *See also id.* ¶ 58.

Appellant presents no other arguments challenging the Examiner’s findings. Accordingly, on this record, we sustain the Examiner’s rejection of independent claim 1 as unpatentable over Gressel and Earnshaw. For the same reasons, we also sustain the Examiner’s rejection of claims 2–22, which Appellant argues collectively with claim 1. *See Appeal Br.* 6, 8; 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

The Examiner's 35 U.S.C. § 103(a) rejection of claims 1–22 is affirmed.

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–22	103(a)	Gressel, Earnshaw	1–22	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED