# In The Matter Of:

APPLE INC. v. SIGHTSOUND TECHNOLOGIES, LLC

> JEFFREY ROBBIN - Vol. 1 April 4, 2014

#### MERRILL CORPORATION

LegaLink, Inc.

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SIGHTSOUND TECHNOLOGIES, LLC EXHIBIT 2377 CBM2013-00023 (APPLE v. SIGHTSOUND) PAGE 000001

UNITED	STATES PATENT	AND TH	RADEMARK OFFICE
BEFOR	E THE PATENT T	RIAL AN	ND APPEAL BOARD
		000	
APPLE INC.,			
Peti	tioner,		
VS.			Case CBM2013-00020 Case CBM2013-00023 Patent 5 191 573
SIGHTSOUND TE	CHNOLOGIES, LL	С,	racene 3,191,373
Pate	ent Owner.		
		/	
	DEPOSI	TION OF	-
	JEFFRE	Y ROBBI	IN
	Friday, A	pril 4,	2014
	OUTSIDE COUNS	ELS' EY	YES ONLY
REPORTED BY:	RACHEL FERRIE	R. CSR	6948
		.,	(SF-001618)
			(01 001010)

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BE IT REMEMBERED that, pursuant to the laws governing the taking and use of depositions, on Friday, April 4, 2014, commencing at 9:03 a.m. thereof, at Ropes & Gray, 1900 University Avenue, 6th Floor, Palo Alto, CA 94303, before me, RACHEL FERRIER, a Certified Shorthand Reporter, personally appeared JEFFREY ROBBIN, called as a witness by the Patent Owner, who, being by me first duly sworn, was thereupon examined as a witness in said action.

APPEARANCES OF COUNSEL

For Petitioner APPLE INC.:

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For Patent Owner SIGHTSOUND TECHNOLOGIES, LLC:

ARNOLD & PORTER LLP BY: JENNIFER A. SKLENAR, Attorney at Law 777 S. Figueroa Street, 44th Floor Los Angeles, CA 90017 Telephone: 213.243.4027 Email: Jennifer.Sklenar@aporter.com

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1	PALO ALTO, CALIFORNIA
2	FRIDAY, APRIL 4, 2014
3	9:03 A.M.
4	
5	000
6	JEFFREY ROBBIN
7	
8	called as a witness, having been first duly
9	sworn, was examined and testified as follows:
10	000
11	EXAMINATION
12	BY MS. SKLENAR:
13	Q Good morning.
14	A Mr. Robbin, my name is Jennifer Sklenar. I'm
15	an attorney for SightSound, and I want to ask you some
16	questions here today.
17	Q First of all, could you state your full name
18	for the record.
19	A Jeffrey Lowell Robbin.
20	Q Have you used any other names in the past?
21	A No.
22	Q You are employed at Apple; correct?
23	A Yes.
24	Q What is your current title?
25	A Vice president of iTunes.

1	Q Have you been deposed before, Mr. Robbin?
2	A Yes.
3	Q How many times?
4	A I can't remember.
5	Q Approximately how many times have you been
6	previously deposed?
7	A Probably less than ten.
8	Q When was the last time you had your deposition
9	taken?
10	A I don't remember.
11	Q Can you give me an approximate date?
12	A No.
13	Q Within the last couple years?
14	A Yes.
15	Q What has been the general subject matter of
16	your prior deposition testimony?
17	MS. FUKUDA: Before the witness answers, can I
18	just put on the record: There's an understanding
19	between the parties here that we will try to avoid the
20	necessity of revealing any Apple confidential
21	information during this deposition, so to the extent
22	that I think a question may call for that or the witness
23	believes that some confidential information might be
24	implicated, we would like to note that on the record.
25	We have a temporary agreement that it could be marked as

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outside counsels' eyes only for today's purposes until 1 2 the parties work out a heightened PO. 3 MS. SKLENAR: I need to ask questions to get 4 information about -- if you want to designate it, that's 5 fine. MS. FUKUDA: My understanding, based on 6 7 correspondence with your side, is you do not believe 8 your questioning would delve into Apple confidential 9 information. 10 MS. SKLENAR: I can't say what you guys think 11 is Apple confidential. I'm going to ask my questions, 12 and you can take it question by question. 13 MS. FUKUDA: Let's do that. 14 Go ahead. 15 THE WITNESS: It's generally over iTunes and 16 what I do at Apple. BY MS. SKLENAR: 17 18 Can you be more specific as to the subject Q 19 matter of your prior depositions? 20 А It's generally -- I mean, what I do at Apple in 21 the last 14 years has typically been around iTunes, and 2.2 so usually I'm being deposed relating to matters around 23 iTunes. 24 Generally, for your prior depositions, were 0 25 these taken in patent litigation matters?

1	A Yes.
2	Q Have you been deposed for matters other than
3	patent litigation matters?
4	A Yes.
5	Q What kind of matters were those?
6	A Contract.
7	Q Can you describe, generally, what type of
8	contract issues?
9	A I was involved in a lawsuit with the Beetles.
10	Q And over what?
11	A A contract between Apple and the Beetles.
12	Q For the patent litigation matters in which you
13	were previously deposed, did those litigations relate to
14	the Music Store component of iTunes?
15	A I don't remember. I think some did.
16	Q Do you know who the parties were to those
17	litigations?
18	A I don't.
19	Q You can't name any of the parties in the
20	litigations in which you were previously deposed?
21	A You know, the honest truth is I try to put this
22	stuff out of my mind when I'm done with it.
23	Q Okay. Fair enough.
24	Have you ever testified in a proceeding other
25	than a deposition?

1	A	Yes.
2	Q	What kind of proceeding?
3	А	The Beetles lawsuit.
4	Q	You testified in court for purposes of that
5	proceedi	ng?
6	A	Yes.
7	Q	Have you testified in any other proceedings
8	other that	an at deposition or for purposes of the trial
9	that you	just mentioned?
10	A	I don't remember.
11	Q	Have you ever been a party to a litigation?
12	А	Personally?
13	Q	Yes.
14	А	No.
15	Q	Well, it sounds like you have some prior
16	experien	ce with deposition, which is to go over some of
17	the proce	edural matters. I'm obviously going to ask you
18	question	s to try to get your best answer under oath.
19		You understand you are under penalty of
20	perjury?	
21	А	Yes.
22	Q	If you don't hear a question or understand a
23	question	and you need clarification, I would ask that
24	you let n	me know and ask for that clarification so we
25	have a c	lear record.

1		Is that okay?
2	A	Sure.
3	Q	Sometimes your attorney will be making
4	objection	s, and as long as she doesn't instruct you not
5	to answer	, I would ask that you go ahead and answer the
6	question.	
7		Is that okay?
8	A	Sure.
9	Q	What, if anything, did you do to prepare to
10	testify h	ere today?
11	A I	Met with counsel.
12	Q	With whom did you meet?
13	A	Andrew I don't remember.
14	I	MS. FUKUDA: Song.
15		THE WITNESS: Andrew Song.
16	BY MS. SK	LENAR:
17	Q	Who is Mr. Song?
18	A Z	Apple attorney.
19	Q	When did you meet with Mr. Song?
20	A	Yesterday.
21	Q	For how long did you meet with him?
22	A	I don't know, four hours, three hours. Three
23	hours.	
24	Q	Did anyone else attend the meeting? You are
25	gesturing	, just to be clear.

1	A Sorry. Ching-Lee. My attorney, Ching-Lee.
2	Q We want to get a clear record for the court
3	reporter, so we need to have you answer audibly and not
4	shake your head "yes" or "no."
5	Is that okay?
6	A Yes.
7	Q We need to not speak over one another. I will
8	try hard not to do that, but I would ask you not to do
9	that as well.
10	A Okay.
11	Q Did you review any documents during your
12	preparation yesterday that refreshed your recollection
13	as to events?
14	MS. FUKUDA: I'm going to caution the witness.
15	You can answer that "yes" or "no," but do not
16	reveal the content of any documents that were reviewed
17	as a result of selection by counsel.
18	THE WITNESS: Yes.
19	BY MS. SKLENAR:
20	Q You did review documents that refreshed your
21	recollection as to events?
22	MS. FUKUDA: Oh, I'm sorry. I did not catch
23	you may answer that question as a "yes" or "no."
24	THE WITNESS: Yes.
25	BY MS. SKLENAR:

1	Q What documents were those?
2	MS. FUKUDA: I just want to make sure the
3	witness understands.
4	Would you repeat the question, because I missed
5	that last clause.
6	BY MS. SKLENAR:
7	Q What documents did you review in preparation
8	for your deposition that refreshed your recollection as
9	to events?
10	MS. FUKUDA: You can answer that question if
11	there's a document that refreshed your recollection.
12	THE WITNESS: It was my declaration.
13	BY MS. SKLENAR:
14	Q Did you review any other documents that
15	refreshed your recollection as to events?
16	A Yes.
17	Q What were those?
18	A I reviewed some patents that were referenced by
19	my declaration.
20	Q Did you review any other documents that
21	refreshed your recollection as to events?
22	THE WITNESS: Can I ask you a question?
23	BY MS. SKLENAR:
24	Q I need you to answer my question. If you have
25	a question about a privilege concern

1	A	It's a privilege concern.
2	Q	Then you may confer with your counsel.
3		MS. FUKUDA: Let's go outside.
4		MS. SKLENAR: Let's go off the record.
5		(Recess taken from 9:09 to 9:10 a.m.)
6	BY MS. S	KLENAR:
7	Q	Mr. Robbin, did you review any other documents
8	that ref	reshed your recollection to events other than
9	what you	have already testified to?
10	А	No.
11	Q	Did you talk to anyone in the course of
12	preparin	g for your deposition other than the two
13	attorney	s you have already identified?
14	A	Yes.
15	Q	With whom did you speak?
16	A	Dave Heller.
17	Q	And who is Mr. Heller?
18	A	Dave Heller works for me on the iTunes team.
19	Q	And what is his position?
20	A	He runs the iTunes client engineering team.
21	Q	Do you know his formal title?
22	A	Director.
23	Q	When did you talk to Mr. Heller?
24	A	Yesterday afternoon.
25	Q	And what did you talk to him about?

1	А	I asked him a question about a feature of
2	SoundJam	
3	Q	What feature was that?
4	A	It's a menu in the application that links out
5	to other	websites.
6	Q	And what specific discussion did you and
7	Mr. Hell	er have about that feature?
8	A	I was asking him how it worked.
9	Q	And what did he tell you?
10	A	He told me how it worked.
11	Q	How does it work?
12	A	It links out to a web browser.
13	Q	And for what purpose does it do that?
14	A	To let you go get music from other websites or
15	from web	sites.
16	Q	Have you testified on the record now to the
17	full sub	stance of your conversation with Mr. Heller?
18	A	Yes.
19	Q	Yesterday?
20	A	Yes.
21	Q	Did you speak to anyone else in preparation for
22	your dep	osition other than the individuals you have
23	identifi	ed?
24	A	No.
25	Q	Did you do anything else to prepare to testify

1	here today other than what you have already testified
2	to?
3	A No.
4	Q Have you previously been deposed for purposes
5	of the litigation between Apple and SightSound?
6	A No.
7	Q Are you taking any medication or have you
8	consumed any alcohol or any other substances that would
9	affect your ability to testify truthfully here today?
10	A No.
11	Q Do you have any mental or physical illness that
12	would affect your ability to testify truthfully?
13	A No.
14	Q Is there anything you can think of that might
15	impair your ability to give full and accurate testimony
16	here today?
17	A No.
18	Q Where did you go to high school?
19	A Allen Park High School.
20	Q In what state?
21	A Illinois.
22	Q What year did you graduate?
23	A 1987.
24	Q What has been your educational background since
25	high school?

1	А	I went to the University of Iowa for
2	undergra	duate, and then I went to the University of
3	Illinois	for an MBA.
4	Q	Well, let's start with the University of Iowa.
5		During what years did you attend?
6	A	1988 to 1991.
7	Q	And what degree did you obtain?
8	А	I got a Bachelor of Science with a in
9	computer	science and a minor in business.
10	Q	And you said you went there 1988 through 1991;
11	is that	correct?
12	А	I think that's right, or is it 1987 to '91?
13	Q	Did you take a break between high school and
14	college?	
15	А	I did not.
16	Q	And what years did you attend the University of
17	Illinois	?
18	А	Right out of the University of Iowa, so after
19	four yea	rs of Iowa, it was two years of Illinois.
20	Q	And you said you obtained an MBA; is that
21	correct?	
22	A	Yes.
23	Q	Have you obtained any other degrees?
24	А	No.
25	Q	Have you done any other formal course work

1	other than as part of your Bachelor of Science and MBA?
2	A No.
3	Q Can you just briefly describe for me your
4	employment history prior to Apple?
5	A Apple is the only full-time job I had out of
6	college.
7	Q You started as an intern at Apple in 1992;
8	correct?
9	A Yes.
10	Q Did you have any sort of employment prior to
11	that?
12	A Odd part-time jobs or high school jobs.
13	Q Did you have any jobs working in an engineering
14	capacity prior to starting at Apple in 1992?
15	A I worked for myself.
16	Q You say you worked for yourself.
17	What do you mean by that?
18	A Well, I was a computer programmer, and so I
19	wrote programs, and I tried to sell those programs via
20	third party.
21	Q Starting with your internship at Apple in 1992,
22	what, specifically, were you hired to do?
23	A Well, as an intern, you have a little bit of
24	flexibility, so I was hired as an intern. I ended up
25	working in the operating system team at Apple doing QA $$

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Page		1
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1	testing.	
2	Q	You were working on a specific product?
3	А	Yeah.
4	Q	What was that?
5	A	It was the it was part of the operating
6	system c	alled a microkernel.
7	Q	And during what years did you work on the
8	microker	nel?
9	A	Actually, it was also a I also did testing
10	of 68k-p	processor emulator. That was the fun part.
11	Q	During what years did you work on the
12	microker	nel?
13	A	Well, the internship was over the summer while
14	I was ge	tting my MBA.
15	Q	So during your internship, you worked on the
16	microker	nel and the 68k-processor emulator that you
17	describe	d; is that correct?
18	A	Yes.
19	Q	Did you do anything else during your internship
20	other th	an what you have already described?
21	A	No.
22	Q	And then when did you return to Apple
23	full-tim	ne?
24	A	In 1993.
25	Q	What were you hired to do?

1	A I worked as an engineer on the microkernel.
2	Q And that was the same project that you worked
3	under in your internship?
4	A It was the same teams.
5	Q What was your title?
6	A Engineer.
7	Q Now, if I understand your background correctly,
8	you were at Apple from 1993 through 1997 initially;
9	correct?
10	A Yes.
11	Q What titles did you hold in the from the
12	1993-through-1997 time period?
13	A Engineer, senior engineer, technical lead I
14	think that was it.
15	Q So while you were an engineer, did you work on
16	projects other than the microkernel that you have
17	described?
18	A The while I was in I can't remember which
19	title I had when, so I don't want to distinguish by
20	title, but the projects that I generally worked on were
21	the microkernel, and then that was the beginnings of
22	trying to do an operating system, which was code-named
23	Copeland. That was also called Mac OS 8, and so I spent
24	my time the first few years doing whatever I could to
25	help that project. So it was mostly around Copeland's

1	operating system.
2	Q So prior to your departure in 1997, did you
3	work on any other projects other than what you have
4	already described?
5	A Yes. In at the last I want to say it was
6	the last year but I'm not exactly sure of the exact
7	timing I worked on a project that was called the Blue
8	Box, and this is a cool project. It was about trying to
9	make Mac OS applications run on top of whatever new
10	operating system without the developer having to do
11	anything special.
12	Q Did you work on any other projects from the
13	1993-through-1997 time period other than the microkernel
14	and the Blue Box?
15	A And Copeland.
16	Q And Copeland.
17	A No.
18	Q To whom did you report?
19	A From the 1993-through-then-'97 time period, I
20	don't think I can remember all my managers. I was hired
21	in by Bill Bruffey, and when I left, I was working for
22	someone named Mark Sinakin (phonetic).
23	Q Do you remember anyone else that you reported
24	to in the 1993-through-1997 time period?
25	A I don't remember who I went to from in between,

no, but I was doing the same job. 1 2 Did anyone report to you during the Ο 3 1993-through-1997 time period? 4 А No. 5 Were you in a specific group during that time Q period? 6 7 А It was the kernel team. And how, generally, was Apple organized during 8 0 9 that time period as far as different teams? 10 А I don't understand the question. 11 Q Well, did Apple have different teams that worked on various projects? You said you were on the 12 13 kernel team. Were there other teams? 14 15 А Yes. 16 How many other teams, approximately, were Q there? 17 18 I have no idea. А 19 Can you give me some sort of estimate? 0 20 А No. Did the kernel team fall within a larger 21 0 2.2 overall department? 23 А It did. 24 What was that? 0 25 А The operating system.

1	Q And then you left Apple in 1997; is that
2	correct?
3	A Yes.
4	Q Now, if I understand it correctly, Steve Jobs
5	returned to Apple in 1996; is that right?
6	A I don't remember exactly when he came back.
7	Q Did Mr. Jobs return to Apple before your
8	departure in 1997?
9	A Yes.
10	Q Did you work with Mr. Jobs prior to your
11	departure in 1997?
12	A I met him one time.
13	Q And under what circumstances did you meet him?
14	A I met him to ask him some questions about the
15	operating system.
16	Q And what types of questions did you ask him; do
17	you recall?
18	A I don't remember. It was a long time ago.
19	Q What was was there any reporting
20	relationship between you and Mr. Jobs before your
21	departure in 1997?
22	A No.
23	Q Why did you leave Apple in 1997?
24	A I had been through some very difficult times at
25	Apple, and I was ready to take a break.

1	Q	What did you do when you left?
2	А	I started out doing nothing.
3	Q	And but eventually you did something; is
4	that c	orrect?
5	А	I did a lot of things. I mean, can you be more
6	specif	ic about what you are looking for?
7	Q	Eventually you started doing something in a
8	work c	apacity; correct?
9	A	Yes.
10	Q	What did you do?
11	A	I started a company.
12	Q	What company did you start?
13	A	I called it SoundStep.
14	Q	And did you start that company with other
15	indivi	duals?
16	A	I don't remember how I incorporated. In the
17	end, t	here were three of us in the company.
18	Q	Who were those individuals?
19	A	Dave Heller and Bill Kincaid.
20	Q	And if I understand it correctly, you worked
21	on	at SoundStep until you returned to Apple in 2000;
22	is tha	t right?
23	A	Yes.
24	Q	Did you have any other employment between the
25	time t	hat you departed Apple in 1997 to the time that

1	you returned in 2000?
2	A No.
3	Q What did you found SoundStep to do?
4	MS. FUKUDA: Objection to form.
5	THE WITNESS: Yeah, I mean, that's a little
6	I guess that's just kind of vague. We did lots of
7	things, so I'm not sure what you are looking for.
8	BY MS. SKLENAR:
9	Q Well, what was the purpose of SoundStep as a
10	company?
11	A To create software programs and sell them.
12	Q How many different software programs did you
13	work on there?
14	A I
15	MS. FUKUDA: Objection to form.
16	THE WITNESS: I think we created two. I don't
17	remember if the I had two projects I was sort of
18	dabbling with at the time, and I don't remember if the
19	other one was in SoundStep or if I was just doing it
20	personally. It's not really relevant.
21	BY MS. SKLENAR:
22	Q Well, what were the two projects that you are
23	thinking of?
24	A One was some kind of a little utility for
25	accelerating applications on the Mac. I don't even

1	remember if we actually did anything with it, but I
2	remember working on it. And the other was SoundJam.
3	Q Is it fair to say that SoundJam was the primary
4	thing that you worked on at SoundStep?
5	A Yes.
6	Q And what is SoundJam?
7	A SoundJam was an MP3 among other things, it
8	was an MP3 player for the Mac, but it did a lot of
9	things.
10	Q What else did it do?
11	A So SoundJam was a comprehensive program for
12	managing your music in a playlist. It would let you
13	copy songs onto third-party MP3 devices. It would let
14	you encode digital music from CDs. It did a lot of
15	things, mostly around digital audio.
16	Q Was did you work on what became SoundJam
17	prior to the time that you founded SoundStep?
18	A I don't I mean, it was during those only
19	during those couple of years. I don't remember if
20	the exact date of incorporation and whether or not we
21	had started a little bit of coding before it was
22	incorporated or not.
23	Q But you didn't work on SoundJam while you were
24	at Apple the first time?
25	A No.

1	Q How far did you get in the development process
2	of SoundJam while you were at SoundStep?
3	A I'm not sure what you mean by how I don't
4	know what you mean by how far in the development
5	process?
6	Q In other words, did you get to a beta version?
7	Did you release the product commercially?
8	A We released the product commercially.
9	Q And what was the name of the product that you
10	released commercially?
11	A SoundJam MP. Also, I think we called it
12	SoundJam MP Plus. There were two versions.
13	Q And how well did it sell?
14	A I don't know how you define "how well."
15	Q How do you define it?
16	A I think we had a decent start of a business.
17	Q So you were selling software; is that correct?
18	A Yes.
19	Q Do you know how many copies of software were
20	sold?
21	A I don't remember.
22	Q Do you have an estimate?
23	A I don't.
24	Q How much were you selling SoundJam for?
25	A I don't remember. Back then, software in

1	general	sold in the tens of dollars, but I don't
2	remember	the exact prices.
3	Q	Do you know how much revenue the company made
4	prior to	its acquisition by Apple?
5	A	No, I don't remember.
6	Q	Do you have an estimate?
7	A	No.
8	Q	You identified two different individuals that
9	you say	you worked with at SoundStep, Mr. Heller and
10	Mr. Kinc	aid; correct?
11	А	Yes.
12	Q	What is Mr. Heller's background?
13	А	What do you mean?
14	Q	What's his educational background?
15	А	I don't know.
16	Q	You have no idea what his educational
17	backgrou	nd is?
18	А	He went to the University of Arizona.
19	Q	And do you know what degrees he holds?
20	А	No, I don't.
21	Q	Is he an engineer?
22	А	Yes.
23	Q	And what about Mr. Kincaid; what's his
24	educatio	nal background?
25	А	I don't remember the school he went to.

1	Q Do you know what type of degree he holds?
2	A He has at least went to college.
3	Q Do you know whether he is an engineer as well?
4	A Yes.
5	Q How did you meet Mr. Heller?
6	A I met Dave well, the first time I met him in
7	person was at Togos restaurant in Cupertino when I came
8	out to California for the first time, but I had met him
9	online before that because he had done a software
10	product that had some compatibility problems with one of
11	my software products. His was wrong.
12	Q And did he also work at Apple prior to your
13	departure in 1997?
14	A Yes.
15	Q And what about Mr. Kincaid; how did you meet
16	him?
17	A I met him at Apple.
18	Q In what capacity did you meet him?
19	A As an engineer.
20	Q Was there a specific project for which you met
21	him?
22	A Copeland.
23	Q Now, you returned to Apple in September of
24	2000; correct?
25	A Yes.

1	Q And did Mr. Heller return as well?
2	A Yes.
3	Q And did Mr. Kincaid return as well?
4	A Yes.
5	Q Did your did you become part of a specific
6	group there upon your return?
7	A Yes.
8	Q What was that?
9	A We were brought back to Apple to what ended
10	up to turn it into what ended up being iTunes, so we
11	were in the iTunes client team, but when we came back to
12	Apple, we didn't call it that because we didn't have the
13	name iTunes at the time.
14	Q What was the group called at the time you
15	returned?
16	A We didn't have a name.
17	Q Were other individuals in that group upon your
18	return?
19	A No.
20	Q To whom did you report when you returned to
21	Apple in September of 2000?
22	A Will Stein.
23	Q S-t-e-i-n?
24	A Yes.
25	Q What was Mr. Stein's position at Apple?

1	A I don't know his title.
2	Q Generally, what was what were his
3	responsibilities?
4	A I was a manager in applications group.
5	Q Since you returned to Apple in September of
6	2000, you have been at the company through today; is
7	that correct?
8	A Yes.
9	Q What positions have you held from starting
10	from the September-of-2000-through-current time period?
11	A I don't think I can remember them all.
12	Everything from engineer on up to vice president, so
13	engineer, senior engineer, director. I don't remember
14	if I was a senior director or if I went right to vice
15	president. I don't remember.
16	Q And to whom have you reported since you
17	returned to Apple in September of 2000?
18	A Will Stein, Sina Tamaddon, Eddie Cue I think
19	that's it.
20	Q To whom do you report today?
21	A Eddie Cue.
22	Q When did you report to Mr. Stein?
23	A When I first came back to Apple, and I don't
24	know when I stopped reporting to him.
25	Q Do you know approximately how long you reported

1	to him?	
2	А	It was years, but I don't remember how long.
3	Q	And when did you report to Sina Tamaddon?
4	A	After Will Stein.
5	Q	Is Sina a male or female?
6	А	Male.
7	Q	What was Mr. Tamaddon's role within Apple?
8	А	He was the vice president of the open
9	applicat	ions group.
10	Q	How long did you report to him?
11	А	Also years, and I don't remember the exact time
12	when I s	topped reporting to him.
13	Q	And when did you begin reporting to Mr. Cue?
14	А	After Sina.
15	Q	Do you know approximately when?
16	А	I don't.
17	Q	What's Mr. Cue's role within Apple?
18	А	I think he's senior vice president of Internet
19	services	•
20	Q	What have your responsibilities generally been
21	since yo	u returned to Apple in September of 2000?
22	A	Generally, I've been running iTunes and other
23	various	media-related projects, engineering.
24	Q	You say "and other various media-related
25	projects	."

1	To what are you referring?
2	A For example, I run the Apple TV engineering
3	team for software.
4	Q Are there any other types of media-related
5	projects that you are referring to?
6	A Well, let's see. ITunes, Apple TV, iTunes U,
7	pod casts, remote, digital rights management. I feel
8	like I'm forgetting one. Another app? I can't
9	remember.
10	Q For iTunes, what have your general
11	responsibilities been?
12	MS. FUKUDA: Objection to form.
13	THE WITNESS: So over the years, my
14	responsibilities have changed for iTunes, so it's
15	everything from the initial lead developer of iTunes all
16	the way up to being responsible for the management of
17	the entire client server engineering team. I'm a lead
18	developer. I've been involved in everything from
19	individual business deals to just product feature
20	definition. It's pretty broad when it comes to iTunes.
21	BY MS. SKLENAR:
22	Q When you returned to iTunes and began reporting
23	to Mr. Stein, did you have any reporting relationship to
24	Mr. Jobs?
25	A No.

1	Q Did you interact with Mr. Jobs during your
2	first year returning to Apple?
3	A Yes.
4	Q In what way did you interact with him?
5	A He would be involved in how we decided to build
6	iTunes, so he would work on user interface and feature
7	definition, and just generally coming up with ideas of
8	how it should all work.
9	Q So if I understand the timing correctly, you
10	returned to Apple in September of 2000; correct?
11	A Yes.
12	Q And when was iTunes released commercially?
13	A It was in January of 2001.
14	Q And what about the Music Store; when was that
15	launched commercially?
16	A April 2003, I think, yeah.
17	Q So from the September of 2000 time period
18	through the January 2001 time period when iTunes was
19	launched, what interactions did you have with Mr. Jobs?
20	A The types of interactions I already mentioned.
21	Q And did you have a some reporting-type
22	relationship to him?
23	A Well, I mean, he was the CEO of the company.
24	Q But what was the reporting chain between you
25	and Mr. Jobs at the time?

1	A Many layers.
2	Q Fair enough.
3	And between January 2001 and April of 2003 when
4	the Music Store was launched, did you have any
5	interactions with Mr. Jobs?
6	A Yes.
7	Q What sort of interactions were those?
8	A Similar kinds of interactions.
9	Q How many times, approximately, would you say
10	you met with Mr. Jobs from the time you returned to
11	Apple in September of 2000 through the launch of the
12	Music Store in April of 2003?
13	A I couldn't begin to estimate.
14	Q Hundreds?
15	A I don't know. A lot.
16	Q Would you say that Mr. Jobs was a hands-on
17	manager?
18	MS. FUKUDA: Objection to form.
19	THE WITNESS: He wasn't my manager.
20	BY MS. SKLENAR:
21	Q Was he a hands-on CEO?
22	MS. FUKUDA: Same objection.
23	THE WITNESS: I wouldn't want to try to
24	characterize how he did his job.
25	BY MS. SKLENAR:

1	Q You have never characterized how you thought
2	Mr. Jobs performed as a CEO?
3	MS. FUKUDA: Objection to form.
4	THE WITNESS: I'm not sure what you are asking.
5	BY MS. SKLENAR:
6	Q Have you ever given your personal views to
7	anyone as far as what Mr. Jobs' style was as a CEO?
8	MS. FUKUDA: Objection to form.
9	THE WITNESS: I'm sure I've said lots of things
10	to lots of people. I don't remember any specific case
11	where I talked about it.
12	BY MS. SKLENAR:
13	Q Well, what are your views as to Mr. Jobs' style
14	as a CEO?
15	MS. FUKUDA: Objection to form and scope.
16	THE WITNESS: I don't think that I'm able to
17	characterize how Steve did his job. I've never been a
18	CEO. I mean, it's I think that my interactions with
19	Steve were always positive, great. I loved working with
20	him.
21	BY MS. SKLENAR:
22	Q Is there any responsibilities that you have had
23	at Apple other than what you have already identified on
24	the record?
25	MS. FUKUDA: Objection to form.

1	THE WITNESS: Responsible I don't know that
2	I could quantify all the different things I've ever done
3	at Apple. I've been there a long time.
4	BY MS. SKLENAR:
5	Q Sure, but I'm just trying to get a sense,
6	generally, of your employment history, and you have
7	already given a fair amount of testimony.
8	Is there anything major that sticks out as far
9	as your employment history that you have not testified
10	to already?
11	A So, I mean, the problem with that question is
12	I've done so many things at Apple. I've been involved
13	in so many projects. Even if it's not my project
14	necessarily, I may have had involvement, so I can't say
15	for sure what you would or would not find relevant, and
16	I don't know that I could even begin to remember every
17	interaction I've had with every employee of Apple.
18	MS. SKLENAR: Okay. Well fair enough.
19	Let's mark, as the first exhibit, a declaration
20	of Jeffrey Robbin in Case CBM2013-00020.
21	And while we are doing that, we will also mark,
22	as Exhibit 2, the declaration of Jeffrey Robbin from the
23	case CBM2013-00023.
24	MS. FUKUDA: Are you marking these as Robbin
25	Exhibits 1 and 2?
1	MS. SKLENAR: Yes.
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2	(Exhibits 1 and 2 were marked for
3	identification by the Court Reporter.)
4	BY MS. SKLENAR:
5	Q Do you recognize exhibits Robbin Exhibits 1
6	and 2?
7	A Are these the same? It's printed differently.
8	Yes.
9	Q And if we would turn starting with Robbin
10	Exhibit 1, we turn to the last page of the document,
11	that's your signature; correct?
12	A Yes.
13	Q And you signed that on March 6th of 2014?
14	A Yes.
15	Q And turning to Robbin Exhibit 1 or, excuse
16	me, Robbin Exhibit 2, you signed that as well on
17	March 6th of 2014; correct?
18	A Yes.
19	Q What was the process by which your declaration
20	was prepared?
21	MS. FUKUDA: Objection to form.
22	THE WITNESS: The declarations were prepared
23	with both me and counsel, working together to create the
24	document.
25	BY MS. SKLENAR:

1	Q Did you draft your declaration yourself?
2	MS. FUKUDA: Objection to form.
3	THE WITNESS: As I already said, I did it
4	together with counsel.
5	BY MS. SKLENAR:
6	Q Are there specific portions that you drafted
7	versus portions that counsel drafted?
8	A I don't know which parts of it were done by me
9	and which parts were done by them. We did it together.
10	Q But is there did you physically type
11	portions of it yourself?
12	A Yes.
13	Q And where did you do that?
14	A At Apple.
15	Q So you did it on your work computer?
16	A I provided edits. I don't yeah, I did it at
17	work.
18	Q Okay. When you say you provided edits, did
19	that mean that you typed them in yourself?
20	A I gave feedback, and I think they incorporated
21	them into the document, and then they gave it back to
22	me.
23	Q Okay. What how long did it take to prepare
24	your declaration?
25	MS. FUKUDA: Objection to form.

1	THE WITNESS: I can't say how much time they
2	spent on it.
3	BY MS. SKLENAR:
4	Q How much time did you spend in the preparation
5	of your declaration?
6	A I think it was a few hours.
7	Q Were there any materials that you considered in
8	preparing your declaration?
9	A No.
10	Q You didn't consider any materials?
11	A I didn't I didn't personally consider any
12	materials other than the declaration and my knowledge of
13	what I've done in the past.
14	Q Did you talk to anyone in the course of
15	preparing your declaration to shape the content that was
16	provided?
17	A Not that I remember.
18	Q So there's nobody that you talked to factually
19	to get information that was then incorporated into your
20	declaration?
21	A Counsel.
22	Q Anyone other than counsel?
23	A No.
24	Q If we would turn to paragraph 7 of your
25	declaration and, first of all, I have put in front of

1	you two of them.
2	Is it your understanding that the substance of
3	the two declarations are identical?
4	A I would have to compare them to each other to
5	make sure they are identical. They looked, at first
6	glance, like they were.
7	Q Are you aware of any differences between the
8	two?
9	A No.
10	Q Let's refer to Robbin Exhibit 1 so we are
11	looking at the same one.
12	If you would turn to paragraph 7 of Robbin
13	Exhibit 1, do you see there a number of Apple patents
14	that have been listed?
15	Do you see that?
16	A Yes.
17	Q By my count, there are nine Apple patents that
18	are listed.
19	Is that does that appear to be accurate to
20	you?
21	A Yes.
22	Q Have you read all nine of the patents that are
23	listed in paragraph 7 of your declaration?
24	A I've refreshed my memory about what the patents
25	were about. I don't know that I've read every word in

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the patents.
 1
               When was the first time that you read or
 2
           0
 3
      refreshed your memory about the patents --
               MS. FUKUDA: Objection to form.
 4
 5
      BY MS. SKLENAR:
               -- cited in paragraph 7?
 6
           Q
 7
               MS. FUKUDA: Objection to form.
               THE WITNESS: I don't know when I first -- I
 8
 9
      mean, when I just said I refreshed my memory, I meant
10
      that I did that as preparation for today.
11
      BY MS. SKLENAR:
               Before you signed your declaration on March 6th
12
           Ο
13
      of 2014, did you review the nine patents listed in
14
      paragraph 7?
15
           А
               No, I did not.
16
               So at the time you signed your declaration, had
           0
17
      you ever read the patents that were listed in
18
      paragraph 7?
19
           А
               Yes.
20
           0
               And when was that?
21
               Whenever we prepared the patents -- a long time
           А
2.2
      ago -- I would have looked the patents over. I don't
23
      know that I would have reviewed every word of the
24
      patent, because I don't always do that.
25
           0
               So for the patents that are listed in
```

1	paragraph 7, you are named as the inventor at least
2	one of the inventors on those patents; correct?
3	A Yes.
4	Q And so you would have reviewed applications
5	that were filed before they were submitted to the Patent
6	and Trademark Office; correct?
7	A To some degree, yes.
8	Q Are you aware, for any of the nine patents
9	listed in paragraph 7, whether you reviewed the issued
10	patents after the applications were filed?
11	A Can you say that again?
12	Q Yeah, that was a bad question.
13	So for the you understand that there's a
14	process that goes on in the Patent Office whereby after
15	you file a patent application, it goes through a process
16	and then it may issue as a patent; correct?
17	A Yes.
18	Q Okay. So for the nine patents that are listed
19	in paragraph 7, did you review any of them after the
20	initial application was filed and prior to the time that
21	you signed your declaration in March of 2014?
22	A I don't remember
23	MS. FUKUDA: Objection to form.
24	THE WITNESS: when I looked at the patents
25	last.

1	BY MS. SKLENAR:
2	Q Okay. So for the nine patents, you are not
3	certain whether you reviewed them after the application
4	stage prior to signing your declaration; correct?
5	MS. FUKUDA: Objection to form.
6	THE WITNESS: I don't remember when I last
7	reviewed any one or each of these patents. I just don't
8	remember.
9	BY MS. SKLENAR:
10	Q Do you know John Kelly?
11	A That name is not familiar to me.
12	Q Have you, to your knowledge, talked to a John
13	Kelly within the last several months?
14	A No.
15	Q Do you know a Lawrence Kenswell?
16	A Yes.
17	Q Have you when's the last time you talked to
18	Mr. Kenswell?
19	A Years ago.
20	Q In what capacity do you know Mr. Kenswell?
21	A I think he was at Universal Music Group.
22	Q In reviewing your declaration in preparation to
23	testify here today, did you notice any errors or
24	anything you wished to correct?
25	A In what?

1	Q	In your declaration?
2	А	No.
3	Q	So as far as you are concerned, based on your
4	review of	the declaration, you stand behind everything
5	that was	stated in the declaration?
6	А	Yes.
7	Q	Were you involved in the negotiations with
8	Apple tha	t led to Apple's acquisition of SoundStep?
9	А	Yes.
10	Q	What was your roll in the negotiations?
11	А	As the president, founder of SoundStep, I
12	directly	negotiated with Apple to acquire the company.
13	Q	Who else was involved in the negotiations with
14	Apple?	
15	А	From the SoundStep side or
16	Q	Yeah, let's start with the SoundStep side.
17	А	It was me.
18	Q	Just you?
19	А	Yeah.
20	Q	Who was involved on the Apple side with regard
21	to the ne	gotiations with SoundStep, to your knowledge?
22	А	Will Stein, Sina Tamaddon. I don't know for
23	sure from	$\mathfrak{n}$ because I was on the other side of it, so
24	those wer	e the two people who I interacted with. I
25	can't tel	l you who on the Apple side. I'm not aware of

1	who he was negotiating with.
2	Q So other than Mr. Stein and Mr. Tamaddon, you
3	are not aware specifically of anyone else who was
4	involved in the negotiations with SoundStep; correct?
5	A Those were the two people who I negotiated
6	financially with over the deal.
7	Q But even apart from the financial negotiations,
8	to the best of your knowledge, those were the only
9	<pre>people involved; correct?</pre>
10	A In the negotiations, those were the only people
11	that were involved, yeah.
12	Q When did the negotiations begin?
13	A I don't remember.
14	Q Do you know approximately how long the
15	negotiations occurred?
16	A No, I don't.
17	Q So if the the acquisition closed in
18	September 2000; correct?
19	A Yes.
20	Q Do you think the negotiations occurred for
21	longer than six months?
22	A No.
23	Q Do you think the negotiations occurred for
24	longer than three months?
25	A I don't know.

1	Q Did Mr. Jobs have any role, to your knowledge,
2	in the negotiations with SoundStep?
3	A I don't know what his I don't know about any
4	involvement on the Apple side in the negotiations with
5	Steve. The only thing I had experienced on my side was
6	I did a demonstration of SoundJam for him.
7	Q When was that?
8	A Before the acquisition.
9	Q I believe you testified earlier that the first
10	time you were at Apple you met Mr. Jobs once; correct?
11	A Yes.
12	Q So before you returned to Apple the second time
13	in September of 2000, did you meet him any other time
14	other than what you have just described where you did
15	the demonstration?
16	A No.
17	Q So prior to September of 2000, you had met
18	Mr. Jobs twice; correct?
19	A Yes.
20	Q Okay. So the demonstration that you did, when
21	did that occur?
22	A I don't remember.
23	Q Where did it occur?
24	A At Apple.
25	Q And what do you recall about the demonstration?

1	
Ţ	A It was quick.
2	Q What did you demonstrate?
3	A Some of the features of SoundJam.
4	Q What features did you demonstrate?
5	A I don't remember.
6	MS. FUKUDA: Can we just slow this down so I
7	have a chance to object. Thank you.
8	BY MS. SKLENAR:
9	Q Well, what features did SoundJam have at the
10	time?
11	MS. FUKUDA: Objection to form.
12	THE WITNESS: I don't remember exactly when the
13	demo happened. It had most, if not all, of the major
14	features that we were shipping.
15	BY MS. SKLENAR:
16	Q What were the major features you were shipping?
17	A The same things I iterated earlier in
18	testimony. There may even be others that I can't
19	remember now. I'm going to have to look at the program.
20	Q Who all was at that demonstration?
21	A I don't remember anybody other than Steve.
22	Q How long did the demonstration occur?
23	A How long was the demonstration? It was quick.
24	It maybe went 30 minutes.
25	Q How long was your total meeting with Mr. Jobs?

1	A	30 minutes.
2	Q	And what do you what, if anything, do you
3	recall t	hat he said?
4	A	I got the impression he liked what he saw.
5	Q	Did he give you any specific feedback?
6	A	No.
7	Q	So you don't recall anything specifically that
8	he said	during that meeting?
9	A	No.
10	Q	Did he talk to you during that meeting about
11	why Appl	e might want to acquire SoundStep?
12	A	No.
13	Q	Did he talk to you during that meeting about
14	any plan	is that Apple had for SoundStep?
15	A	No.
16	Q	- CONFIDENTIAL APPLE INFORMATION -
17		
18		
19	A	- CONFIDENTIAL APPLE INFORMATION -
20		
21		
22		
23		
24		
25		

1	Q Do you recall anything else that was ever
2	conveyed to you about the reasons that Apple wanted to
3	acquire SoundStep?
4	A No.
5	Q Do you recall any information that was conveyed
6	to you about Apple's plans for SoundStep's technology
7	post-acquisition?
8	MS. FUKUDA: Let me caution the witness.
9	This may call for confidential Apple
10	information, but you may answer.
11	THE WITNESS: I think can you repeat the
12	question.
13	MS. SKLENAR: Sure.
14	Q Do you recall any information that was conveyed
15	to you about Apple's plans for SoundStep's technology
16	post-acquisition?
17	A I'm not sure if you are asking if it was about
18	Apple's plans for what they were going to do after the
19	acquisition or if this is about things that I learned
20	when I was at Apple after the acquisition.
21	Q Well, let's start pre-acquisition.
22	Did you learn anything about Apple what
23	Apple was planning to do post-acquisition?
24	A I told you all I know about what I was told
25	about why they would buy SoundJam.

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1	Q Understood. Thank you.
2	- CONFIDENTIAL APPLE INFORMATION -
3	A - CONFIDENTIAL APPLE INFORMATION -
4	MS. FUKUDA: Just a question.
5	Is that confidential or public?
6	THE WITNESS: Oh, that's a good question. It's
7	probably confidential.
8	MS. FUKUDA: All right. I'm just going to I
9	will try my best to designate portions of this
10	confidential, and we will need an opportunity to go
11	through the transcript later.
12	BY MS. SKLENAR:
13	Q So once SoundStep was acquired by Apple, were
14	there discussions within the company about what the
15	plans were for SoundStep's technology?
16	MS. FUKUDA: Give me one second.
17	Objection to form.
18	THE WITNESS: So immediately after not
19	immediately. After soon after the acquisition was
20	complete and we started working at Apple, that was when
21	they told us what we wanted to go build, which was a new
22	music player.
23	BY MS. SKLENAR:
24	Q And you said "a new music player."
25	What did that turn out to be?

1	A That's what turned into iTunes, the desktop
2	application.
3	Q And what was the what was the relationship
4	between SoundStep's technology and what became iTunes?
5	A So you have to define when you say "iTunes,"
6	you have to be more specific because there's so many
7	different things that people think of when they mean
8	iTunes.
9	I'm talking specifically about the iTunes
10	desktop application, and we took SoundJam and we used
11	its core components, its engine, if you will, to then
12	build a new experience on top of that core technology,
13	which turned into the application we released as iTunes,
14	the desktop app.
15	Q And that was the product you testified was
16	released in January of 2001?
17	A Yes.
18	Q So at the time that SoundStep became part of
19	Apple, were there other initial discussions about the
20	plans for SoundStep's technology other than what you
21	just testified to?
22	A No.
23	Q And eventually you started working on what
24	became the iTunes Music Store; correct?
25	A Yes.

1	Q When did that work start?
2	A I don't remember.
3	Q Did you do any work on what eventually became
4	the Music Store while you were at SoundStep?
5	MS. FUKUDA: Objection to form.
6	THE WITNESS: It's more complicated than that.
7	The iTunes like I said, SoundJam, we took core
8	components of it, which made its way into iTunes, the
9	desk top application. iTunes, the desktop application,
10	is where the iTunes Music Store was first embodied, and
11	so iTunes, the desktop app, had both the store and
12	components of SoundJam built into it. But the store
13	itself is a much broader, more complicated conversation.
14	BY MS. SKLENAR:
15	Q Did the SoundJam technology, as it existed
16	pre-acquisition, have the capability of being used to
17	download music over the Internet?
18	A It had the ability to stream music over the
19	Internet for playback, which is a form of download, so I
20	don't know if that answers your question.
21	Q Did the SoundJam technology, as it existed
22	prior to the acquisition by Apple, have the ability that
23	its users could purchase music over the Internet and
24	download it to their PCs?
25	A It had a menu, which was a web menu, which had

links to other sites where you could go and download 1 2 music over the Internet, free and purchase. 3 0 What sites were those? I don't know the list. Most of them, I don't 4 А think, exist anymore. 5 So other than linking to other sites, the 6 Q 7 SoundJam technology didn't have the capability to itself 8 be used to purchase music over the Internet and download 9 it to a PC; correct? 10 MS. FUKUDA: Objection to form. 11 THE WITNESS: SoundJam itself -- it's what I 12 said before. It had the ability to link out to 13 websites, and that's the only way you could get to other 14 sites to purchase music. 15 BY MS. SKLENAR: 16 In paragraph 5 of your declaration, you state: Ο 17 "Prior to March 2002, I became involved in developing a music purchase service for Apple, which became the 18 iTunes Music Store, currently known as the iTunes 19 20 Store." 21 Do you see that? 2.2 Yes. Α 23 Is there any more specifics you can give me as Q 24 to when that work started on the music purchase service? 25 А No.

1	Q Did you have discussions with individuals
2	within Apple about this decision to develop a music
3	purchase service?
4	A Yes.
5	Q Was there some sort of group that was involved
6	in the initial planning to develop that service?
7	MS. FUKUDA: Objection to form.
8	THE WITNESS: New products at Apple are a
9	little more organic than that. There were lots I'm
10	sure at the time and I don't remember all the
11	details there were lots of discussions with a variety
12	of people about when and how we might do a music store.
13	It was complicated.
14	BY MS. SKLENAR:
15	Q Do you recall the first discussions that you
16	were part of within Apple as to the decision to develop
17	a music purchase service?
18	A No, I don't.
19	Q Whose idea was it to develop a music purchase
20	service within Apple?
21	MS. FUKUDA: Objection to form.
22	THE WITNESS: There's no one person who I would
23	say was responsible for deciding that we should do that.
24	These types of things are collaborations, and lots of
25	people are involved in various discussions.

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Page 54
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BY MS. SKLENAR:
 1
               Was Mr. Jobs involved in the discussion to
 2
           \bigcirc
 3
      develop -- strike that.
               Was Mr. Jobs involved in the decision to
 4
 5
      develop a music purchase service within Apple?
           А
               Yes.
 6
 7
               What was his involvement in that decision, to
           0
 8
      your knowledge?
 9
               From my point of view, we had lots of
           А
10
      conversations that included Steve just around doing a
11
      music store. He may have had other discussions I'm not
      aware of.
12
13
           0
               Do you have any information about whether
14
      Mr. Jobs was planning to develop a music purchase
15
      service at Apple prior to the acquisition by -- of
16
      SoundStep?
17
               I don't have any knowledge of what Mr. Jobs'
           Α
18
      plans would have been.
19
               Do you have any knowledge about whether one of
           0
20
      the reasons Mr. Jobs wanted to buy SoundStep was to use
21
      the technology to develop a music purchase service at
2.2
      Apple?
23
           А
               I --
24
               MS. FUKUDA: Objection to form.
25
               THE WITNESS: I have no way to know what
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Mr. Jobs thought or knew at the time. 1 MS. SKLENAR: Let's go off the record. 2 3 MS. FUKUDA: Let's take a break. (Recess taken from 10:01 to 10:12 a.m.) 4 BY MS. SKLENAR: 5 Welcome back, Mr. Robbin. 6 Q 7 Did you talk to counsel about the substance of 8 your testimony during the break? 9 Α No. 10 What was the initial concept behind the music Ο 11 purchase service that Apple began developing? 12 MS. FUKUDA: Objection to form. 13 THE WITNESS: Can you be more specific? BY MS. SKLENAR: 14 15 0 Have you ever -- do you recall any discussions 16 about what the initial concept would be for the music 17 purchase service? 18 MS. FUKUDA: Objection to form. 19 THE WITNESS: We had lots of conversations 20 about the Music Store when we were creating it, so I 21 don't know how to tease out what you are asking. 2.2 BY MS. SKLENAR: 23 Well, what was the general concept that you 0 24 decided to develop when that work started? 25 MS. FUKUDA: Same objection.

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1	THE WITNESS: I mean, I think the more
2	appropriate question and answer is: What is the iTunes
3	Music Store, or what was it when it first launched?
4	BY MS. SKLENAR:
5	Q Well, I get to ask you the questions I want to
6	ask you. I realize that may be frustrating to you, but
7	this is the opportunity for my client to ask you
8	questions.
9	So the question I want to ask you right now is:
10	When the development work started, what was the concept
11	that Apple had decided upon that it began to develop?
12	MS. FUKUDA: Objection to form.
13	THE WITNESS: I don't know how to answer your
14	question. I don't remember way back when we first
15	started doing the development for the iTunes Music
16	Store, all the things that went into what we would want
17	to make iTunes to be.
18	BY MS. SKLENAR:
19	Q Do you recall at any point Mr. Jobs publicly
20	describing what the idea behind the iTunes Music Store
21	was?
22	MS. FUKUDA: Objection to form.
23	THE WITNESS: No.
24	BY MS. SKLENAR:
25	Q Have you heard Mr. Jobs speak publicly about

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1	iTunes at various points in your career?
2	A Yes.
3	Q How many times would you say he's done that?
4	A I can't remember.
5	Q Have you ever heard Mr. Jobs describe the idea
6	as to come up with a music service where you don't have
7	to subscribe to it. You can just buy music at \$0.99 a
8	song, and you can have great digital. You can have
9	great rights to use it.
10	Have you ever heard him say anything like that?
11	A I don't remember.
12	MS. SKLENAR: I'm going to put in front of you
13	what we will mark as Robbin Exhibit 3.
14	(Exhibit 3 was marked for identification by the
15	Court Reporter.)
16	BY MS. SKLENAR:
17	Q Mr. Robbin, this is excerpt from the book I,
18	Steve, Steve Jobs In His Own Words, and if we turn to
19	the third page, you see there's a copyright date for the
20	book for 2011.
21	Do you see that?
22	A I do.
23	MS. SKLENAR: And I will just note for the
24	record that I, personally, have put some green tape
25	flags on the pages to indicate what from the book should

1	be copied. We do see the green tape flags on the pages.
2	Those are from me, but, otherwise, this is a copy from
3	the book.
4	Q And if I could ask you to turn to the last page
5	of this document. There is a quotation there from
6	Mr. Jobs, it says, "Apple keynote address, September 12,
7	2006?"
8	Do you see that?
9	A I do.
10	Q What is an Apple keynote address?
11	A Apple keynotes are events where Apple
12	introduces or an announces or unveils or does something
13	to the public something we are working on.
14	Q How frequently would Apple have keynote
15	addresses?
16	A They vary. A few times a year.
17	Q Have you, personally, attended Apple keynote
18	addresses where Mr. Jobs has spoken about various Apple
19	products?
20	A Yes.
21	Q Would you have attended the Apple keynote
22	address for iTunes in the September 2006 time period?
23	A I attended many of the Apple keynotes. I don't
24	remember if I was at this particular one.
25	Q You see, within this quotation in the middle,

1	there is a sentence that starts: "And so our idea."
2	Do you see that?
3	A I do.
4	Q And it states: "And so our idea was to come up
5	with a music service where you don't have to subscribe
6	to it. You can just buy music at 99 cents a song, and
7	have great digital - you have great rights to use it."
8	Do you see that?
9	A I do.
10	Q Did I read that correctly?
11	A You read what's written here.
12	Q Do you have a recollection of whether Mr. Jobs
13	made those statements in the September of 2006 time
14	period?
15	A I do not.
16	Q Do you have any reason to dispute that that was
17	part of the idea that became embodied within iTunes?
18	MS. FUKUDA: Objection to form.
19	THE WITNESS: I don't know whether he said that
20	or not. This is just something out of a book that he
21	didn't write, so I don't know.
22	BY MS. SKLENAR:
23	Q Understood, but my question is: Do you have
24	any reason to dispute that the words that I just read
25	into the record were part of the idea that became

1	embodied within iTunes?
2	MS. FUKUDA: Objection to form.
3	THE WITNESS: I have no reason to agree that he
4	said it or disagree that he said it. I just don't know.
5	BY MS. SKLENAR:
6	Q My question is not whether or not he said it;
7	my question is: Do you dispute that that was part of
8	the idea behind iTunes?
9	MS. FUKUDA: Objection to form.
10	THE WITNESS: So I don't know what Steve
11	thought his idea was with respect to this.
12	BY MS. SKLENAR:
13	Q Would you agree that part of the idea behind
14	iTunes was to allow consumers to buy music at \$0.99 a
15	song and to have great digital rights to use it?
16	MS. FUKUDA: Objection to form.
17	THE WITNESS: I think that iTunes is many, many
18	things. I think one aspect of it is buying music at
19	\$0.99 or was buying music at \$0.99 a song.
20	BY MS. SKLENAR:
21	Q Mr. Jobs is also quoted here as saying, "You
22	can burn as many CDs as you want for personal use, you
23	can put it on your iPods, you can use it in your other
24	applications, you can have it on multiple computers."
25	Do you see that?

1	A I do.
2	Q Do you have any reason to dispute that Mr. Jobs
3	made those remarks in the September 2006 time period at
4	an Apple keynote address?
5	A I have no reason to believe he did or did not
6	say this.
7	Q Would you agree that part of the concept behind
8	iTunes was to allow consumers to burn as many CDs as
9	they want for personal use?
10	A iTunes has many concepts that are behind it or
11	as part of it, and one of the things that iTunes did let
12	you do was burn CDs for personal use.
13	Q Do you agree that one of the things iTunes
14	allowed was to put music on iPods?
15	A Yes.
16	Q And would you agree that one of the things
17	strike that.
18	Would you agree that one of the things that
19	iTunes allowed was to use music in your other
20	applications?
21	A iTunes actually isn't what allowed that.
22	QuickTime was the technology that was used that would
23	allow you to use iTunes-purchased music inside other
24	applications.
25	Q And would you agree that one of the things

1	behind iTunes was to allow music to be used on multiple
2	computers?
3	A Yes. iTunes let you listen to your music on
4	multiple computers.
5	Q I want to turn back to paragraph 7 of your
6	declaration.
7	When we were talking about the patents that are
8	listed in paragraph 7 previously, you said you talked
9	about how you would have viewed the applications prior
10	to the submission to the Patent and Trademark Office;
11	correct?
12	A To some extent, yes.
13	Q In fact, do you know whether, as an inventor,
14	you were required to read the application and sign an
15	oath as part of this, the patent prosecution process?
16	MS. FUKUDA: Objection to form.
17	THE WITNESS: I don't know what the legal
18	requirements are.
19	BY MS. SKLENAR:
20	Q But did you, in fact, sign an inventor's oath
21	for the patent applications that are reflected in this
22	paragraph 7?
23	A Yes.
24	Q How many patents do you have, generally?
25	MS. FUKUDA: Objection to form.

<ul> <li>BY MS. SKLENAR:</li> <li>Q Do you have any estimate how many patents name</li> <li>you as inventor or co-inventor?</li> <li>A I have quite a few, I believe.</li> <li>Q More than a hundred?</li> <li>A I don't believe so.</li> <li>Q Do you have any formal patent training?</li> <li>MS. FUKUDA: Objection; form.</li> <li>THE WITNESS: I don't know what you mean by</li> <li>"patent training."</li> <li>BY MS. SKLENAR:</li> <li>Q Have you ever taken any course work regarding</li> <li>the patent process?</li> <li>A No.</li> <li>Q Do you consider yourself to have a fair amount</li> <li>of patent experience by virtue of the patents on which</li> <li>you are listed as an inventor or co-inventor?</li> <li>MS. FUKUDA: Objection to form.</li> <li>THE WITNESS: I just think of myself as</li> <li>somebody who creates great products, and working with</li> <li>Apple, we have patented a number of inventions we have</li> <li>come up with, but I don't think of myself as an expert</li> <li>on the patent process.</li> </ul>	1	THE WITNESS: I don't know.
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<ul><li>24 on the patent process.</li><li>25 BY MS. SKLENAR:</li></ul>	23	come up with, but I don't think of myself as an expert
25 BY MS. SKLENAR:	24	on the patent process.
	25	BY MS. SKLENAR:

1	Q Generally, for the patents on which you are
2	named as an inventor or co-inventor, do you have any
3	role in the prosecution process after the signing of the
4	inventor's oath?
5	A Prosecution I'm not sure what you mean.
6	What do you mean by "prosecution process"?
7	Q Do you understand the general process by which
8	a patent application goes through after it's filed with
9	the U.S. Patent and Trademark Office until it issues as
10	a patent?
11	MS. FUKUDA: Objection to form.
12	THE WITNESS: I just know that we file the
13	patents, and then eventually they either issue or don't,
14	and sometimes there's additional steps that get taken,
15	but that's pretty much the extent of my knowledge of the
16	official process of it.
17	BY MS. SKLENAR:
18	Q Okay. So based on your answer, after you file
19	the patent application, do you generally tend to have
20	any involvement to the extent there are additional steps
21	that need to get taken?
22	A Sometimes.
23	Q Would you say you often have involvement beyond
24	the patent application stage?
25	MS. FUKUDA: Objection to form.

1	THE WITNESS: I would say sometimes.
2	BY MS. SKLENAR:
3	Q Have you had any involvement with patent
4	applications relating to the iTunes Music Store on which
5	you are not named as an inventor?
6	MS. FUKUDA: Objection to form.
7	THE WITNESS: I don't know.
8	BY MS. SKLENAR:
9	Q You don't know?
10	A No.
11	Q So generally within Apple, did you have any
12	responsibility for the patent practice as it related to
13	the iTunes Music Store?
14	MS. FUKUDA: Objection to form.
15	THE WITNESS: So, again, when it comes to
16	patents at Apple, we have attorneys who help us prepare
17	patents and work with us on it. And so when we invent
18	things, we get asked questions, and we review documents,
19	and there's a number of things that we do for it. I
20	can't say whether or not somebody else working on a
21	patent didn't ask me questions related to it. They may
22	have. I don't know.
23	BY MS. SKLENAR:
24	Q Is there any formal committee or group that you
25	are part of that has general oversight as to patent

1	prosecution for the iTunes Music Store?
2	MS. FUKUDA: Objection to form.
3	THE WITNESS: Can you explain what you mean by
4	"patent prosecution"?
5	BY MS. SKLENAR:
6	Q The process of getting patents.
7	A Oh. From time to time, I have been part of
8	various groups that look at concepts on whether we
9	should proceed with a patent or not.
10	Q So you may have done that, been part of
11	discussions about concepts and whether or not Apple
12	should proceed to get a patent for applications on which
13	you are not a named inventor?
14	A So I don't know if this is
15	MS. FUKUDA: Yeah, I think you could just go
16	with a "yes" or "no" answer.
17	THE WITNESS: Okay. Yes.
18	BY MS. SKLENAR:
19	Q What can you just describe for me the
20	general process by which Apple would decide to file a
21	patent application relating to a feature under
22	development for the iTunes Music Store?
23	MS. FUKUDA: I'm going to caution the witness
24	that I think this calls for Apple confidential
25	information. To the extent you can answer that without

revealing such information, go ahead. 1 2 MS. SKLENAR: You can mark the record, but I'm 3 entitled to get an answer to my question. You can mark it as confidential. 4 5 MS. FUKUDA: I mean, just so we are clear, we are talking about marking this under the heightened PO 6 7 that the parties are negotiating and --8 MS. SKLENAR: I don't believe this is highly 9 confidential. I just want to know the general process. 10 I'm not asking for specific substance of technology or 11 anything like that. I'm asking for general --12 MS. FUKUDA: I'm sorry. This is an Apple 13 confidential process that you are getting into, and as 14 we had agreed, Mr. Robbin's declaration is limited in scope. We don't think you need to get into this level 15 16 of detail. 17 So for the protection of Apple and their confidential information, we have begun a process. 18 I'm 19 going to designate these internal Apple communications 20 and acquisition discussions and all the other things you 21 have gotten into as Apple confidential, subject to 2.2 outside counsels' eyes only until we complete our 23 negotiations for heightened PO. 24 But other than that, you can answer, 25 Mr. Robbin.

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1	THE WITNESS: Can you repeat the question?
2	MS. SKLENAR: Sure.
3	Could you read back the question.
4	(Record read by the Reporter as follows:
5	"QUESTION: Can you just describe for me the
6	general process by which Apple would decide to
7	file a patent application relating to a feature
8	under development for the iTunes Music Store?")
9	THE WITNESS: So I'm not involved in all of the
10	discussions regarding how Apple might decide to go after
11	a patent or not. I've been involved in some discussions
12	from time to time about certain areas of Apple products
13	and whether we should apply for a patent on it. There's
14	no one set process, or there hasn't been as far as I'm
15	aware of, but I'm not involved in all of that. I only
16	get involved in when the patent applies to me.
17	MS. SKLENAR: Fair enough.
18	Q Is it to the best of your knowledge, is it
19	generally Apple's practice to seek patent protection on
20	aspects of its products that it believes to be invented?
21	MS. FUKUDA: Objection to form.
22	THE WITNESS: So, again, I can't say because
23	I'm not part of the patent team. I don't know what
24	criteria they use to decide what patents they should or
25	should not go after getting.

1	BY MS. SKLENAR:
2	Q For the patent applications on which you are
3	listed as an inventor or co-inventor, is it your
4	understanding that a decision is made to seek patent
5	protection because Apple believes that those that the
6	subject matter is inventive?
7	MS. FUKUDA: Objection to form.
8	THE WITNESS: I can't say what all the reasons
9	are that we would choose to go after getting a patent.
10	I can just say that for the patents that we have gone
11	after, it's because we decided to go after them.
12	BY MS. SKLENAR:
13	Q But so if a patent application is filed in
14	your name as an inventor or co-inventor, would it be
15	your understanding that Apple believed that the subject
16	matter was inventive?
17	MS. FUKUDA: Objection to form.
18	THE WITNESS: So I don't want to define what
19	"inventive" means. I would simply say that if we if
20	we went after a patent for something that I invented or
21	was part of inventing, then it would be because what
22	that invention was was something we felt was worth going
23	after a patent for.
24	BY MS. SKLENAR:
25	Q You have signed a number of the inventor's

1	oaths or declaration; correct?
2	A Yes.
3	Q Okay. So that's something you do when a patent
4	application is filed that lists you as an inventor or
5	co-inventor; correct?
6	A Yes.
7	Q And in doing so, are you attesting that you
8	believe that you are the original, first, and sole
9	inventor or joint inventor of the subject matter that's
10	claimed in the patent application?
11	MS. FUKUDA: Objection to form.
12	THE WITNESS: I don't think I'm qualified to
13	say what's implied by all of the patent legalese around
14	that signature. As an individual responsible for the
15	invention, working with counsel, I work with them to
16	prepare the patent application. That's the extent of my
17	knowledge around it.
18	BY MS. SKLENAR:
19	Q But you understand that when you are signing
20	the oath, you are saying that you think you are, in
21	fact, an inventor of the subject matter that's claimed
22	and for which a patent is sought; is that correct?
23	MS. FUKUDA: Objection to form.
24	THE WITNESS: Yes.
25	BY MS. SKLENAR:

1	Q And so have you, to your knowledge, ever signed
2	a patent application stating that you think that you are
3	the first inventor of the subject matter where something
4	was in the prior art?
5	MS. FUKUDA: Objection to form.
6	THE WITNESS: Not that I'm aware of.
7	BY MS. SKLENAR:
8	Q So to the best of your knowledge, when you
9	apply for patent protection for subject matter which you
10	are named as an inventor or co-inventor, it's because
11	there's a decision made that it's inventive in some way?
12	MS. FUKUDA: Objection to form.
13	THE WITNESS: I think I've already answered
14	that question.
15	BY MS. SKLENAR:
16	Q And what is your answer?
17	A Well, do we want to go back to the
18	Q I want to your answer.
19	A Repeat your question.
20	Q Sure.
21	To the best of your knowledge, when you apply
22	for patent protection for subject matter on which you
23	are named as an inventor or co-inventor, it's because a
24	decision is made that it is inventive in some way; is
25	that right?
1	MS. FUKUDA: Objection to form.
----	--
2	THE WITNESS: So when I sign the declaration
3	or the when I sign for a patent and, again, I
4	don't know the legalese about what is implied and what
5	you are actually asking I believe that that means
6	that we have created something that we think is worthy
7	of applying for a patent and that the patent itself and
8	the process speaks for itself.
9	BY MS. SKLENAR:
10	Q Do you know generally whether Apple has ever
11	tried to file a patent application within one year after
12	the commercial release of the feature?
13	MS. FUKUDA: Objection to form.
14	THE WITNESS: I don't know what Apple's general
15	patent process is.
16	MS. SKLENAR: Just to your knowledge.
17	Q Has Apple ever made a decision to try to file a
18	patent application within one year after a feature has
19	become publicly available?
20	MS. FUKUDA: Same objection.
21	THE WITNESS: I can only speak to patents that
22	have been applied for on my behalf, and I think that
23	those there are patents for that that have been
24	applied for. Actually, I don't know that I can say when
25	the invention was created and what the date is. I think

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1	you have to go by whatever the filing date is, is the
2	filing date.
3	MS. SKLENAR: My question is a little
4	different.
5	Q My question is: Are you aware of whether there
6	could be any loss of patent protection if an application
7	is not filed within a year of commercial release of the
8	patented invention?
9	MS. FUKUDA: I'm going to object to this whole
10	line. This is way beyond the scope. I've given you a
11	lot of leeway. This is you know, given the length of
12	Mr. Robbin's declaration, you have gone far afield into
13	Apple's patent.
14	MS. SKLENAR: Counsel, just note your
15	objection.
16	MS. FUKUDA: No. I have to state this for the
17	record because you have gone on for more than half an
18	hour on this issue, so we object to this entire line as
19	beyond the scope, and you have asked repetitive
20	questions, but I'll let the witness answer.
21	MS. SKLENAR: The right thing to say is
22	"Objection; scope."
23	MS. FUKUDA: Don't tell me how to object. I
24	want to state my objection on the record.
25	You can answer the question, Mr. Robbin.

1	THE WITNESS: What was the question?
2	MS. SKLENAR: Could you read back the question.
3	Let me just do it.
4	Q My question is whether you are aware that there
5	could be a loss of patent rights if an application is
6	not filed within a year of commercial release of a
7	particular feature for which the protection is sought?
8	MS. FUKUDA: Objection to form.
9	THE WITNESS: So I'm not as you have
10	established, I'm not an expert on patent law or what the
11	rights are, and so I don't know what the real rules are.
12	BY MS. SKLENAR:
13	Q But have you ever heard of that general
14	concept; that there could be a loss of patent rights if
15	an application is not filed within a year of it being
16	made public?
17	MS. FUKUDA: Objection to form.
18	THE WITNESS: So, again, I don't know what the
19	real loss of rights or not loss of rights are based on
20	any of that, so I'm just not knowledgeable about that,
21	and I wouldn't want to speculate on rumors.
22	BY MS. SKLENAR:
23	Q You say in paragraph 7 of your declaration that
24	"Apple has been granted U.S. patents on many inventions
25	relating to the iTunes Music Store"

1	Do you see that?
2	A Yes.
3	Q Did you go back for any of the patents listed
4	in this paragraph 7 and look at the claims that were
5	ultimately issued before signing your declaration?
6	A I don't remember.
7	Q Do you know what it means for a company to
8	practice its own patent?
9	MS. FUKUDA: Objection to form.
10	THE WITNESS: I'm not sure.
11	BY MS. SKLENAR:
12	Q Have you ever heard that phraseology, that
13	somebody is practicing their own patent?
14	A I mean, I can infer from the words what it
15	means, but I'm not sure what it means legally.
16	Q Have you are you aware of do you know
17	what a patent claim is?
18	A Yes.
19	Q And do you know, generally, how the
20	determination is made of whether or not somebody is
21	practicing a patent claim?
22	MS. FUKUDA: Objection to form.
23	THE WITNESS: No.
24	BY MS. SKLENAR:
25	Q So do you know of whether any determination was

1	made for any of the patents listed in paragraph 7 as to
2	whether or not Apple was, in fact, practicing any of the
3	issued patent claims?
4	MS. FUKUDA: Objection to form, and to the
5	extent this calls for attorney-client-privileged
6	information, I instruct the witness not to answer.
7	But otherwise you can.
8	THE WITNESS: Okay. Can you repeat the
9	question.
10	MS. SKLENAR: Sure.
11	Q Do you know whether or not a determination was
12	made for any of the patents listed in paragraph 7 as to
13	whether or not Apple was, in fact, practicing any of the
14	claims?
15	A I do not know.
16	MS. SKLENAR: Let's mark, as Exhibit 4,
17	U.S. Patent 7,958,441.
18	(Exhibit 4 was marked for identification by the
19	Court Reporter.)
20	BY MS. SKLENAR:
21	Q Mr. Robbin, do you recognize this patent?
22	A Looks familiar.
23	Q In fact, this is a patent that's listed in
24	paragraph 7 of your declaration; correct?
25	A Yes.

1	Q When is the last time you reviewed this patent?
2	A I refreshed my memory of it to prepare for
3	today.
4	Q So the last time was yesterday; is that
5	correct?
6	A Yes.
7	Q And prior to yesterday, when was the last time
8	that you reviewed this '441 patent?
9	A I don't remember.
10	Q If you would look at the front page of this
11	patent, do you see where it first of all, do you
12	understand where to look on a patent to determine its
13	filing date?
14	A Yes.
15	Q Can you tell me, looking at this patent, when
16	it was filed?
17	A This says April 1st, 2005.
18	Q And below that, do you see a provisional filing
19	date relating to this patent?
20	A I see a prior do you mean the prior
21	publication data oh, no, below that, provisional
22	application number?
23	Q Yes.
24	A Filed January 7, 2005.
25	Q Do you have any reason to believe that the

1	information reflected on this patent is inaccurate?
2	A No.
3	MS. SKLENAR: And let's mark, as Robbin
4	Exhibit 5, U.S. Patent 8,046,369.
5	(Exhibit 5 was marked for identification by the
6	Court Reporter.)
7	BY MS. SKLENAR:
8	Q Do you recognize this patent?
9	A It looks familiar.
10	Q In fact, you are one of the named inventors
11	listed on this patent; correct?
12	A Yes.
13	Q And can you tell me what the filing date of
14	this patent is?
15	A September 4th, 2007.
16	Q Do you have any reason to believe that the
17	filing date listed on this patent is inaccurate?
18	A No.
19	Q And so this patent was filed how long after the
20	release of the iTunes Music Store?
21	A Well, the iTunes Music Store was in April of
22	2003, so this would be so four-plus years.
23	Q And for the patent that we previously looked
24	at, the '441 patent, how long was that filed after
25	release of the iTunes Music Store?

1	A Well, the original or the provisional o	one?
2	Q Well, let's let's say the provision	al.
3	A So that was 2005 January, so April 2003	3, so a
4	year and three months; is that right? I've got	to do
5	that backwards. Year and nine months? Yeah.	
6	Q A year and nine months is your answer?	
7	A Sounds right.	
8	Q Let's turn back to your declaration at	
9	paragraph 8.	
10	You see at in that paragraph, in the	e third
11	line, you mention a Tom Weyer I'm not sure is	£I'm
12	pronouncing that correctly.	
13	Do you see that name?	
14	A Yes.	
15	Q How do you pronounce that?	
16	A I don't know.	
17	Q Do you know a Mr. Weyer?	
18	A No.	
19	Q So you don't know that person that's re	eferenced
20	at that paragraph of your declaration; correct?	
21	A I don't remember him.	
22	Q But you may have interacted with him;	you just
23	don't recall?	
24	A I have no remembrance of a Tom Weyer.	
25	Q And another person is referenced called	d Mark

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1	Gavini.	
2		Do you see that?
3	A	Yes.
4	Q	Do you know a Mr. Gavini?
5	А	I remember the name, but I don't really know
6	him.	
7	Q	Have you ever interacted with a Mr. Gavini
8	while at	Apple?
9	A	Not that I remember.
10	Q	You say you remember the name.
11		Under what context do you remember his name?
12	A	I don't know him. The name is just familiar,
13	but I've	been at Apple a long time, so I may have heard
14	his name	before.
15	Q	In parentheses, after his name, you say "now
16	Marco Maz	zzoni."
17		Do you see that?
18	A	Yes.
19	Q	How did you know that Mr. Gavini had changed
20	his name	to Mazzoni?
21	A	I was told by counsel.
22	Q	So you don't have any independent knowledge of
23	that?	
24	A	I do not.
25	Q	Have you heard of "evangelists," of that term

1	being us	ed within Apple?
2	А	Yes.
3	Q	Evangelist for a particular technology?
4	А	I've heard the term "evangelist."
5	Q	What is an "evangelist"?
6	А	I think they used to be somebody who was in
7	develope	r relations.
8	Q	Have you interacted with any evangelists during
9	your tim	e at Apple?
10	А	Probably.
11	Q	Do you know one way or another?
12	А	No, because I don't know who all is an
13	evangeli	st and who isn't.
14	Q	You said there were it was somebody who was
15	in devel	oper relations; is that right?
16	А	Yes.
17	Q	What is "developer relations"?
18	А	A division of Apple I think they are in
19	develope	r relations, to be clear. It's a developer
20	relation	s is an area of Apple who is responsible for
21	supporti	ng developers.
22	Q	And what does that mean, to support a
23	develope	r?
24	А	I don't know. I'm not in developer relations.
25	Q	Have you under what circumstances would you

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1	interact with individuals from developer relations?
2	A If we had something in our product that we
3	needed to do something for a developer.
4	Q How often would you say you have interacted
5	with people in developer relations during your time at
6	Apple?
7	A Infrequently.
8	Q So fewer than ten times?
9	A I don't know how many times.
10	Q Are there any names of individuals you recall
11	within developer relations?
12	A Sure.
13	Q Who do you recall?
14	A C.K. Haun, Ron Okamoto those are really the
15	only two people I can think of right now.
16	Q Are there other individuals within developer
17	relations that you believe you have interacted with, but
18	you just don't remember their names?
19	A There's so many people at Apple, I can't
20	remember who I interact with.
21	Q Did you interact with individuals at developer
22	relations during the development of the iTunes Music
23	Store?
24	A Not related to anything about iTunes that I can
25	remember.

1	Q When's the first time at Apple that you recall			
2	interacting with individuals within developer relations?			
3	MS. FUKUDA: Objection to form.			
4	THE WITNESS: I don't remember.			
5	BY MS. SKLENAR:			
6	Q Have you heard of the company SightSound?			
7	A Not before this case.			
8	Q Do you read The Wall Street Journal?			
9	A Infrequently.			
10	Q But occasionally you do?			
11	A Yes.			
12	Q Are you aware of any articles in The Wall			
13	Street Journal that came out about the company			
14	SightSound?			
15	A No.			
16	MS. SKLENAR: Let's mark, as Exhibit 6, this			
17	reprinted article from The Wall Street Journal.			
18	(Exhibit 6 was marked for identification by the			
19	Court Reporter.)			
20	BY MS. SKLENAR:			
21	Q Mr. Robbin, I've put in front of you an article			
22	from May 7th, 1999 from The Wall Street Journal entitled			
23	"Two Entrepreneurs Try to Turn Net Patent Into a			
24	Blockbuster."			
25	Do you see that?			

1	A Yes.
2	Q Did you read The Wall Street Journal in the May
3	of 1999 time period?
4	A Not that I remember.
5	Q So does this document refresh your recollection
6	about whether you have ever heard of SightSound?
7	A No.
8	Q In the middle column, the paragraph that starts
9	"A lot," about a third of the way down, there's the last
10	sentence talks about how the individuals launched a
11	company now called Sightsound? Do you see that,
12	Sightsound.com?
13	A Yes.
14	Q And then in the next paragraph, it states:
15	"They focused first on music, working with unsigned
16	artists to build a market from the bottom up. In 1995,
17	a local band, the Gathering Field, became the first (to
18	their knowledge) to sell songs as file downloads."
19	Do you see that?
20	A I do.
21	Q Does that refresh your recollection as to
22	whether you previously heard of SightSound?
23	A No.
24	Q If you would turn to paragraph 9 of your
25	declaration, at the end of that paragraph, you state

that Apple didn't copy anything from any SightSound 1 2 entity. 3 Do you see that? 4 А Yes. 5 You aren't privy to all the information Q received by Mr. Jobs at Apple; isn't that right? 6 7 MS. FUKUDA: Objection to form. 8 THE WITNESS: No. I don't know of every piece 9 of information that Mr. Jobs ever received. 10 MS. SKLENAR: Right. 11 0 So you, for example, weren't aware of the fact 12 that Mr. Jobs had received correspondence from SightSound in at least the January of 1999 time period? 13 14 MS. FUKUDA: Objection to form. 15 THE WITNESS: I have no way to know what 16 information Mr. Jobs did or did not receive regarding 17 anything. 18 BY MS. SKLENAR: Are you aware that SightSound sold music over 19 Ο the Internet for \$0.99? 20 MS. FUKUDA: Objection to form. 21 2.2 THE WITNESS: No. 23 BY MS. SKLENAR: 24 And do you know when -- strike that. Ο 25 And do you know whether Mr. Jobs has ever

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spoken publicly about whether Apple has been shameless 1 2 about stealing great ideas? 3 MS. FUKUDA: Objection to form. 4 THE WITNESS: No, I'm not aware of anything 5 like that. BY MS. SKLENAR: 6 7 You have never heard any quotes like that Ο 8 attributed to him? 9 Not that I remember. А 10 MS. SKLENAR: I'm going to show you a YouTube 11 clip. I'll spare you all the commercial. I'll wait 12 until we get through the commercial. 13 (Discussion off the record.) BY MS. SKLENAR: 14 15 Ο Mr. Robbin, I'm going to show you -- and you 16 will see my cracked laptop that I have, but bear with 17 me. 18 Do you recognize the gentleman there as Steve 19 Jobs? 20 I can't see it. А 21 I would invite you to get up and make sure you Q 2.2 can see it and assure yourself that it's Mr. Jobs. 23 MS. FUKUDA: The screen is small. 24 THE WITNESS: It's angled and dimmed and it's, 25 like, weird.

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1	MS. SKLENAR: Well, feel free to get up and
2	look.
3	MS. FUKUDA: You can do that if you like. I'll
4	come with you.
5	BY MS. SKLENAR:
6	Q Does that appear to you to be Mr. Jobs?
7	A It does.
8	MS. SKLENAR: Okay. And now I'm going to play
9	the clip.
10	(YouTube video playing and transcribed as
11	follows:
12	It comes down to trying to expose yourself to
13	the best things that humans have done and then
14	try to bring those things in to what you are
15	doing. I mean, Picasso had a saying. He said,
16	Good artists copy; great artists steal. And we
17	have, you know, always been shameless about
18	stealing great ideas.
19	And I think part of what made the Macintosh
20	great was that the people working on it were
21	musicians and poets and artists and zoologists
22	and historians who also happened to be the best
23	computer scientists in the world.)
24	MS. FUKUDA: Let me just put on the record:
25	I'm objecting to this clip. We have not previously seen

1	this. It's a random YouTube clip, so it is whatever it				
2	is.				
3	But to the extent you have questions that may				
4	be relevant, you may ask.				
5	BY MS. SKLENAR:				
6	Q So you did hear Mr. Jobs in the clip that I				
7	just played referencing the fact that Apple has always				
8	been shameless about stealing great ideas; correct?				
9	MS. FUKUDA: Objection to form. And also				
10	object to the YouTube clip.				
11	THE WITNESS: I heard the audio of clip play				
12	back, yes. I don't know what he actually thought when				
13	he was saying it. I don't know what he believed to be				
14	true. I just can just saw the clip.				
15	BY MS. SKLENAR:				
16	Q But those were Mr. Jobs' words; correct?				
17	MS. FUKUDA: Objection to form.				
18	THE WITNESS: I can't say anything about where				
19	that clip came from or what it was.				
20	BY MS. SKLENAR:				
21	Q But do you I mean, you saw the video of				
22	Mr. Jobs saying the words that Apple has always been				
23	shameless about stealing great ideas; correct?				
24	MS. FUKUDA: Objection to form and to the				
25	YouTube clip.				

1	THE WITNESS: I have no idea what he was			
2	thinking or what that clip actually means or what the			
3	context is. It's just a YouTube clip.			
4	BY MS. SKLENAR:			
5	Q Have you ever heard Mr. Jobs talk about going			
6	to Xerox PARC in the '70s?			
7	A No.			
8	Q Have you ever heard him speak publicly about			
9	where he got the idea for the user interface to be used			
10	at Apple?			
11	MS. FUKUDA: Objection to form.			
12	THE WITNESS: What user interface?			
13	BY MS. SKLENAR:			
14	Q The user interface that was initially developed			
15	at Apple?			
16	A Which user interface?			
17	Q I'm just asking if you ever heard him generally			
18	speak about it?			
19	MS. FUKUDA: Objection to form.			
20	THE WITNESS: You are not giving me enough			
21	context to answer your question.			
22	BY MS. SKLENAR:			
23	Q So you have never heard him tie a visit to			
24	Xerox PARC to the development of any user interface at			
25	Apple.			

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1	Is that your testimony?			
2	MS. FUKUDA: Objection to form.			
3	THE WITNESS: I have not heard Steve speak			
4	about Xerox PARC, if that's what you are asking.			
5	MS. SKLENAR: Thank you.			
6	Q I want to talk about iTunes prior to the launch			
7	of the Music Store, and I believe you testified earlier			
8	that iTunes itself was launched in January 2001;			
9	correct?			
10	A The iTunes desktop client was first launched in			
11	January of 2001.			
12	Q And what did the iTunes desktop client allow			
13	consumers to do?			
14	MS. FUKUDA: Objection to form.			
15	THE WITNESS: I mean, among other things, I			
16	guess it was a music player that allowed you to convert			
17	CDs into MP3 files. It let you play back MP3 files. It			
18	had playlist management, a library. It had a lot of			
19	features.			
20	BY MS. SKLENAR:			
21	Q The prior to the launch of the Music Store,			
22	the iTunes desktop client didn't allow users to download			
23	and purchase music from the Internet; correct?			
24	MS. FUKUDA: Objection to form.			
25	THE WITNESS: The iTunes Music Store came			

<ul> <li>features that the SoundJam program had had, like I</li> <li>talked about earlier.</li> <li>BY MS. SKLENAR:</li> <li>Q So when the Music Store was first released in</li> <li>April of 2003, what functionality did that add?</li> <li>MS. FUKUDA: Objection to form.</li> <li>THE WITNESS: It added a lot of different</li> <li>functionality. It had there were and I don't</li> <li>remember all of the features that were added to iTunes</li> <li>at the same time as the Store, because I'm sure there</li> <li>was more than just the Store that got added in that</li> <li>version.</li> <li>BY MS. SKLENAR:</li> <li>Q But at that point, the iTunes Store could be</li> <li>used to purchase music over the Internet; correct?</li> <li>A Well, I mean, the iTunes desktop client, in</li> <li>conjunction with the iTunes Music Store service, and that</li> <li>was built into the iTunes desktop client.</li> <li>Q So after the release of the Music Store in</li> <li>2003, users could either copy a CD that they had</li> <li>purchased onto iTunes or they could purchase music</li> <li>through the Store and acquire it that way; is that</li> </ul>	1	later. The iTunes desktop client had similar streaming				
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24 through the Store and acquire it that way; is that 25 correct?	23	purchased onto iTunes or they could purchase music				
25 correct?	24	through the Store and acquire it that way; is that				
	25	correct?				

1	MS. FUKUDA: Objection to form.				
2	THE WITNESS: They could get music a lot of				
3	different ways. Those are simply two of them.				
4	BY MS. SKLENAR:				
5	Q Okay. But two of the ways were either to copy				
6	a CD that they had purchased physically from a CD store				
7	or to download the music through the Music Store;				
8	correct?				
9	A So users could get their music a lot of				
10	different ways. I can't tell you how they got their CDs				
11	or so you are what you said was more focused than,				
12	I think, what the real answer is. The that release				
13	of the iTunes desktop client added the ability to have				
14	the iTunes Music Store as part of that desktop client.				
15	Q So did the iTunes Music Store provide an				
16	additional way that clients could acquire their music				
17	that was stored on iTunes?				
18	MS. FUKUDA: Objection to form.				
19	THE WITNESS: The iTunes Music Store, when we				
20	added it, was a service that had a bunch of different				
21	attributes and features that were part of it, including				
22	the ability to purchase music and download it from the				
23	iTunes Music Store.				
24	BY MS. SKLENAR:				
25	Q Was part of the reason that Apple decided to				

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1	develop the iTunes Music Store was because there were			
2	consumers who wanted to purchase music directly over the			
3	Internet rather than go out and buy CDs?			
4	MS. FUKUDA: Objection to form.			
5	THE WITNESS: There were many different reasons			
6	for why we did the iTunes Music Store. It was a very			
7	complicated decision with all sorts of different			
8	factors, and I'm not sure that I could characterize it			
9	as just what you said.			
10	BY MS. SKLENAR:			
11	Q But isn't it one of the reasons that Apple			
12	decided to develop the iTunes Music Store; that			
13	customers wanted to be able to purchase music directly			
14	over the Internet rather than go out and buy CDs?			
15	A I think that when we developed the iTunes Music			
16	Store, we weren't sure I mean, we weren't sure for			
17	sure of anything because nobody had been successful in			
18	this space before us, but I think that the iTunes Music			
19	Store was the first credible attempt to add all the			
20	different components that made the Store successful into			
21	one thing, and that included being able to buy the music			
22	from the Music Store and deliver that to the customer.			
23	Q And when you say "buy the music from the Music			
24	Store," you are talking about buying the music over the			
25	Internet, that feature that was available to consumers?			

1	A Buying from the iTunes Store.				
2	Q I would like to turn to paragraph 9 of your				
3	declaration, and I'm on the part of that paragraph				
4	that's on page 5.				
5	And starting on the third line, you reference				
6	the idea, and then there's a dash that says "prevalent				
7	in the industry since the mid-1980s," another dash,				
8	"that it would be desirable to sell music and video				
9	files over computer networks."				
10	Do you see that?				
11	A Yes.				
12	Q When you are talking about the industry there,				
13	what industry are you talking about?				
14	A I think it's just the industry of actually,				
15	I'm not sure I was being specific about a single				
16	industry, because it could have been both the music				
17	industry as well as the computer industry.				
18	Q So you are not sure what you meant by the use				
19	of the term "industry" there?				
20	MS. FUKUDA: Objection to form.				
21	THE WITNESS: I think that what I meant was				
22	it's more than one industry. I think it's the music				
23	industry and the computer industry.				
24	BY MS. SKLENAR:				
25	Q In fact, Apple itself tried to obtain patent				

1	protection relating to the sale of music files over			
2	computer networks in 2004, didn't it?			
3	MS. FUKUDA: Objection to form.			
4	THE WITNESS: I don't know.			
5	MS. SKLENAR: Well, let's mark, as the next in			
6	order, Exhibit 7, U.S. Patent 7,797,242.			
7	(Exhibit 7 was marked for identification by the			
8	Court Reporter.)			
9	BY MS. SKLENAR:			
10	Q Do you recognize this patent?			
11	A It looks familiar to me.			
12	Q You are named as one of the co-inventors on			
13	this patent; correct?			
14	A Yes.			
15	Q And we see some other individuals, Patrice			
16	Gautier.			
17	Do you see that?			
18	A Yes.			
19	Q Did I pronounce her name correctly?			
20	A His.			
21	Q Oh, sorry.			
22	Who is Mr. Gautier?			
23	A He was an engineer on the iTunes Store.			
24	Q Do you know what his technical background was?			
25	A Engineer.			

1	Q	Can you give me any more specifics than that as
2	to his e	educational training?
3	А	No.
4	Q	And what about Max Muller; do you know
5	Mr. Mull	ler?
6	A	Yes.
7	Q	Am I pronouncing his name correctly?
8	A	I'm not positive.
9	Q	What was who is Mr. Muller?
10	A	An engineer on the iTunes Music Store.
11	Q	And do you know what his background was
12	technically?	
13	A	No.
14	Q	And then there's a Thomas Burkholder.
15		Do you see that?
16	A	Yes.
17	Q	Who was Mr. Burkholder?
18	A	An engineer on the iTunes Music Store.
19	Q	Do you know what Mr. Burkholder's technical
20	backgrou	ind was?
21	А	No.
22	Q	And then we see yourself and Mr. Heller, and
23	then the	ere's a Thomas Dowdy.
24		Do you see that?
25	А	Yes.

1 Q What was -- who is Mr. Dowdy? 2 Α He was. He passed away. He is or he was an 3 engineer on the iTunes team. Do you know what Mr. Dowdy's technical 4 0 5 background was? 6 No. А 7 0 And then we see Mike Wiese. 8 Do you see that? 9 Yes. А Who is Mr. Weise? 10 0 11 А "Weise," is, I think, how it's pronounced, and 12 an engineer on the iTunes team. 13 0 Do you know what Mr. Weise's technical 14 background was beyond that? 15 Α No. Actually, I think he went to MIT. I'm not 16 positive. 17 What is the earliest filing date that you see 0 18 associated with this '242 patent? 19 I'm not sure how to read this. Looks like А 20 there's an April 25th, 2003 provisional application. 21 If we would turn within this patent to the Ο 2.2 Summary of the Invention at column 2. 23 Do you see that? 24 What page is it on? А 25 Well, I'm going to -- let me just point this Q

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1	out.
2	So I've turned about halfway in, and if we look
3	at the top, you see that there's columns that are
4	identified.
5	There's a column 1 and a column 2?
6	A Yeah.
7	Q I'm at column 2.
8	A Okay.
9	Q If you could just read the first two paragraphs
10	of the Summary of the Invention to yourself. I mean,
11	feel free to look through the rest of it, but I wanted
12	to ask you about those two paragraphs in particular.
13	A Okay.
14	Q Does this refresh your recollection as to what
15	this patent relates to?
16	A I mean
17	MS. FUKUDA: Objection to form.
18	THE WITNESS: it refreshes my recollection
19	of these two paragraphs.
20	BY MS. SKLENAR:
21	Q Okay. Do you know, generally, what this patent
22	relates to?
23	A Yes.
24	Q What is that?
25	A It appears to be about, reading from the

1	abstract, methods and systems for network-based purchase
2	and distribution of media, and there's a lot more about
3	it, but I think it's related to network-based purchase
4	and distribution of media.
5	Q Do you have any specific recollection of the
6	file the application relating to this patent as you
7	sit here today?
8	A This is a while ago.
9	Q So you don't recall the circumstances
10	surrounding the filing of this application?
11	A I'm sure this was around the time that we did
12	the iTunes Music Store.
13	MS. SKLENAR: Let's mark, as Exhibit 8, the
14	Declaration and Power of Attorney for Original
15	U.S. Patent Application.
16	(Exhibit 8 was marked for identification by the
17	Court Reporter.)
18	BY MS. SKLENAR:
19	Q So, Mr. Robbin, I've put in front of you what's
20	been marked Robbin Exhibit 8, and if you can just look
21	at that first page, and I'm going to compare it to
22	Exhibit 7, but in the first the top third of the
23	page, it lists a U.S. application number. You see it
24	says 10/833,267.
25	Do you see that?

1	A Yes.
2	Q And can you just confirm that that's the
3	application that's reflected in the patent that we were
4	just looking at, Robbin Exhibit 7?
5	A Where would I find that number?
6	Q Well, if we look at the first column, about a
7	third of the way down
8	A Oh, yes.
9	Q you see that application number is also
10	reflected?
11	A Yes.
12	Q So would that suggest to you that this is the
13	Declaration and Power of Attorney for the application
14	that's associated with the patent that is Robbin
15	Exhibit 7?
16	MS. FUKUDA: Objection to form.
17	THE WITNESS: I mean, I don't know what the
18	details of this document are, but the number on this
19	matches the number on that patent.
20	BY MS. SKLENAR:
21	Q And by "this," you mean the Declaration and
22	Power of Attorney, Exhibit 8?
23	A Yes.
24	Q Okay. If you would turn within Exhibit 8 to
25	the third page, you see that your name appears there as

1	the fourth inventor?
2	A Yes.
3	Q And that's your signature on page 3?
4	A Yes.
5	Q And you signed this document in September of
6	the 2004?
7	A Yes.
8	Q Turning back to the first page, do you
9	understand that in signing this, that you are saying
10	that you believed that you were an original, first, and
11	joint inventor of the subject matter which is claimed
12	and for which a patent is sought on the invention
13	entitled, and then it gives the title of the
14	application?
15	A Yes.
16	Q And if you turn to the second page of this
17	Exhibit 8, halfway down the page, you see that there is
18	a statement that says, "I hereby declare that all
19	statements made herein" are "of my own knowledge are
20	true and that all statements made on information and
21	belief are believed to be true"
22	Do you see that?
23	A Yes.
24	Q And you signed under that statement; correct,
25	on the following page?

1	A Yes.
2	Q And this statement further says that "these
3	statements were made with the knowledge that willful
4	false statements and the like so made are punishable by
5	fine or imprisonment, or both"
6	Do you see that?
7	A Yes.
8	Q And you signed under that statement too as
9	well; correct?
10	A Yes.
11	MS. SKLENAR: Okay. So I would like to mark,
12	as Exhibit 9, a patent application entitled "Method and
13	System for Network-Based Purchase and Distribution of
14	Media."
15	(Exhibit 9 was marked for identification by the
16	Court Reporter.)
17	BY MS. SKLENAR:
18	Q Do you recognize this Exhibit 9?
19	A I haven't I don't remember it.
20	Q Can you confirm for me the title first of
21	all, Exhibit 9 says it's a patent application; correct?
22	A It does.
23	Q And it lists the title as "Method and System
24	for Network-Based Purchase and Distribution of Media."
25	Do you see that?

1	A Yes.
2	Q And it lists the assignee as Apple Computer,
3	<pre>Inc.; correct?</pre>
4	A Yes.
5	Q And if you would just refer back to Exhibits 7
6	and 8, that is the same title that we see reflected on
7	those two documents; correct?
8	A Yes.
9	Q Do you have any reason to dispute that this is
10	the application that corresponds to U.S. Patent
11	7,797,242 that we see as Exhibit 7?
12	MS. FUKUDA: Objection to form.
13	THE WITNESS: I don't know because you haven't
14	shown me anything that like a number like you did for
15	the other documents that tie it to it, so I just don't
16	know.
17	BY MS. SKLENAR:
18	Q Well, I mean, if you could just turn to page 2
19	of the application, Exhibit 9, and then turn to column 1
20	of the of patent 7,797,242, would it appear to you,
21	comparing these two, that the content is the same as far
22	as the Background of the Invention section?
23	MS. FUKUDA: Objection to form.
24	THE WITNESS: Background of the Invention? Is
25	that oh, is that in the middle of this document or

1	something?
2	MS. SKLENAR: Yeah, starting in the patent at
3	column 1.
4	THE WITNESS: Oh.
5	MS. FUKUDA: Same objection.
6	THE WITNESS: Again, unless you want me to read
7	the whole thing and compare them word for word, I can't
8	tell you whether they are the same.
9	BY MS. SKLENAR:
10	Q Well, why don't you take some time and compare
11	the two. If you don't believe it's the same, I want you
12	to tell me that.
13	A I don't know if it is or isn't, and there's no
14	number on this document that says it's the exact same,
15	and so I'm not a patent attorney, and so I just don't
16	know if this is that same document. I agree that it had
17	the title, but
18	Q Sure. Well, take some time. I'm just asking
19	you to compare for example, start with the Background
20	of the Invention section. Compare what's in the
21	application; compare what's in the patent. Let me know
22	if you don't think it's the same.
23	MS. FUKUDA: Objection to form.
24	MS. SKLENAR: Why don't I stop you. I've
25	thought of an easier way to do this.

1	THE WITNESS: Okay.
2	BY MS. SKLENAR:
3	Q Okay. In the patent application, Exhibit 9,
4	you see where it says the attorney docket number?
5	A Exhibit 9?
6	Q In the patent application.
7	A In this, okay.
8	Q Okay. Top of the page of Exhibit 9, you see an
9	attorney docket number?
10	A Yes. Yes.
11	Q Okay. And now, if we turn back to Exhibit 8,
12	the Declaration and Power of Attorney, do you see that
13	that same attorney docket number appears on Exhibit 8?
14	A Yes, I do.
15	Q Okay. Do you have any reason to dispute that
16	this patent application, Exhibit 9, is not the patent
17	application that's being referenced in Exhibit 8?
18	MS. FUKUDA: Objection to form.
19	THE WITNESS: I certainly agree that they have
20	the same attorney docket number and that they are likely
21	related.
22	MS. SKLENAR: Thank you.
23	Q If you could turn within the Exhibit 9, patent
24	application, to claim 1, and that's at page 43.
25	A Okay.

Q I'm not going to read it for the record, but 1 claim 1 recites: "A method for purchasing access to a 2 3 media item over a network..." Do you see that? 4 5 Yes. Α And it lists five -- four steps. 6 Q 7 It has an (a), (b), (c), and (d). А Okay. So it lists four components; is that 8 0 9 right? 10 MS. FUKUDA: Objection to form. 11 THE WITNESS: I see the claim. It says what 12 you said, and then there's an (a), (b), (c), and (d). 13 MS. SKLENAR: Okay. 14 THE WITNESS: Yeah. 15 BY MS. SKLENAR: 16 So there's at least four lettered parts to the 0 17 claim; correct? 18 There's an (a), (b), (c), and (d) for point 1 Α on the claims. 19 20 0 Fair enough. 21 Do you have any recollection as to why Apple 2.2 decided to seek patent protection on this claim? 23 MS. FUKUDA: Objection to form. 24 THE WITNESS: Again, I don't know what the 25 decision-making process was around whether the --

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whether to patent it or not. 1 BY MS. SKLENAR: 2 3 Q What does this claim generally relate to? MS. FUKUDA: Objection to form. 4 5 THE WITNESS: I'm not qualified to decide what a claim is legally related to or not. 6 7 BY MS. SKLENAR: 8 0 But this is a claim that was sought by Apple; 9 is that correct? 10 А This is a claim in a patent application from 11 Apple. 12 Do you have any understanding as to whether --Q 13 how this claim related to iTunes? 14 MS. FUKUDA: Objection to form. 15 THE WITNESS: Again, I'm not really qualified 16 to say what a claim is related to or not. The claim, I think, speaks for itself. 17 18 BY MS. SKLENAR: 19 So as you read the claim sitting here today, 0 20 you can't tell me whether or not this claim relates to 21 iTunes? 2.2 А I wouldn't --23 MS. FUKUDA: Objection to form. 24 THE WITNESS: I wouldn't want to try to interpret what a claim relates to or doesn't relate to. 25

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1	BY MS. SKLENAR:				
2	Q Do you have an understanding as to whether				
3	inventors have a duty of candor in the Patent Office?				
4	A I don't know what you are talking about.				
5	Q Have you ever been told that in being listed as				
6	an inventor on a patent, that the inventor has special				
7	duties to inform the Patent Office of prior art?				
8	A Yes.				
9	Q That's something you have heard before;				
10	correct?				
11	A Yes.				
12	Q In your paragraph going back to your				
13	declaration, paragraph 9, when you state that the idea				
14	that it would be desirable to sell music and video files				
15	over computer network was prevalent in the industry				
16	since the mid-1980s do you see that?				
17	A It says it the other way around, but, yes.				
18	Q How does it say it? I want to make sure we				
19	have it accurate for the record.				
20	A It says, "Apple developed those technologies				
21	based on the predecessor product SoundJam MP that it				
22	acquired in September 2000, and based on the significant				
23	innovative work done at Apple to make commercially				
24	viable the idea - prevalent in the industry since the				
25	mid-1980s - that it would be desirable to sell music and				

1	video files over computer networks."				
2	Q Can you look for me at Exhibit 7, the				
3	U.S. Patent 7,797,242, and I want to refer you to the				
4	References Cited section of the patent.				
5	Do you know where to look for that section?				
6	A I see it.				
7	Q Yes.				
8	And you see some references cited on that page,				
9	do you?				
10	A I do.				
11	Q And now, on the following page as well, page 2,				
12	you see additional references cited?				
13	A I do.				
14	Q On the second page, there is a "Other				
15	Publication" referenced, which is four references down,				
16	"Strunk et al., 'The Elements of Style,'" from 1979.				
17	Do you see that?				
18	A No.				
19	Q On page 2.				
20	A Oh, sorry.				
21	Q Under the heading "Other Publications."				
22	A Oh, I was in the wrong spot. Yes.				
23	Q The fourth reference cited is: Strunk et al.,				
24	"The Elements of Style" from 1979.				
25	Do you see that?				

1	A I do.			
2	Q Do you know what that's referring to?			
3	A No.			
4	Q Do you see any other references listed here			
5	from prior to 1990?			
6	A Not directly referenced here, no.			
7	Q The references that are set forth as references			
8	cited, other than the Strunk reference, are from later			
9	than 1990; correct?			
10	A Yes.			
11	Q If you would turn back to the patent that we			
12	have been looking at to column 1, so this is U.S. Patent			
13	7,797,242 at column 1.			
14	You see the heading the "Background of the			
15	Invention" that we were looking at earlier?			
16	A Yes.			
17	Q Do you have any general understanding of what			
18	the Background of the Invention section of the patent is			
19	intended to convey?			
20	A I'm going to go out on a limb and say the			
21	background of the invention.			
22	Q Is there anything more that you understand			
23	about the nature of that section other than what you			
24	have already said?			
25	A I'm not a patent lawyer.			

1	Q Can you confirm for me that nowhere in the
2	Background of the Invention section does Apple say that
3	the idea that it would be desirable to sell music and
4	video files over computer networks was prevalent in the
5	industry since the mid-1980s?
6	MS. FUKUDA: Objection to form.
7	THE WITNESS: So can you repeat the question?
8	MS. SKLENAR: Yeah.
9	Q Can you confirm for me that nowhere in the
10	Background of the Invention section does Apple say that
11	the idea that it would be desirable to sell music be
12	desirable to sell music and video files over computer
13	networks was prevalent in the industry since the
14	mid-1980s?
15	MS. FUKUDA: Objection to form.
16	THE WITNESS: Well, I don't see anything in the
17	Background of the Invention that talks about a date, but
18	I do think that the substance of what it's talking about
19	is does imply the idea that the idea of distributing
20	the music like that would be it's an idea that was
21	common, but I don't see anything about the '80s in here.
22	BY MS. SKLENAR:
23	Q And when you say it implies that the idea was
24	common, to where are you referring?
25	A Well, it talks about music delivery or

1	distribution over the Internet becoming popular, and the				
2	idea was around certainly much older than that, but				
3	it doesn't say the '80s.				
4	MS. SKLENAR: I'm going to strike the portion				
5	of your last answer that says "the idea was around				
6	certainly much older than that."				
7	MS. FUKUDA: Objection. It's responsive to				
8	your question.				
9	MS. SKLENAR: I don't agree.				
10	Let's take a break.				
11	(Recess taken from 11:29 to 11:38 a.m.)				
12	BY MS. SKLENAR:				
13	Q Mr. Robbin, have you talked to your counsel				
14	about the substance of your testimony while on break?				
15	A No.				
16	Q Turning back to Exhibit 7, the U.S. Patent				
17	7,797,242, that we were looking at earlier, I notice				
18	that you didn't list that patent in paragraph 7 of your				
19	declaration.				
20	Can you confirm that it's not listed there?				
21	A No, it not.				
22	Q Who made the decision as to what patents to				
23	list in paragraph 7 of your declaration?				
24	A That would be jointly with me and counsel.				
25	O But you don't recall why the patent that we see				

1	at Exhibit 7 wasn't listed?				
2	A No.				
3	Q If you could turn back to Exhibit 4, looking at				
4	the References Cited section of Exhibit 4, the second				
5	column on the first page, there's a reference to a				
6	patent 5,191,573 to Hair.				
7	Do you see that?				
8	A Yes.				
9	Q Do you know what the Hair patent is?				
10	A I know it has something to do with this				
11	deposition.				
12	Q Do you have an understanding that it's one of				
13	the patents owned by SightSound?				
14	A Yes.				
15	Q And if you look at U.S Exhibit 5,				
16	U.S. Patent 8,046,369, looking at the U.S. Patents				
17	documents within the References Cited section, first				
18	page, the first column.				
19	Do you see that?				
20	A Yes.				
21	Q And several patents in, there's also a				
22	reference to U.S. Patent 5,191,573 to Hair.				
23	Do you see that?				
24	A Yes.				
25	Q And that's again, that's one of the patents				

1	owned by SightSound, to your understanding; correct?
2	A Yes.
3	Q Now, turning back to Exhibit 7, U.S. Patent
4	7,797,242, can you confirm for me that the Hair patent,
5	5,191,573, does not appear within the References Cited
6	section?
7	A Correct.
8	Q It seems like you looked at the first page, but
9	you may need to look at the second page as well to
10	confirm that.
11	A Correct.
12	MS. SKLENAR: Okay. Thank you. I have no
13	further questions at this point.
14	MS. FUKUDA: I have a couple follow-up
15	questions for Mr. Robbin.
16	EXAMINATION
17	BY MS. FUKUDA:
18	Q Mr. Robbin, in your declaration for Exhibit 1,
19	in the paragraph that patent owner's counsel is just
20	pointing to, paragraph 7, those nine patents that are
21	identified there, is that the exclusive list, or are you
22	aware of any other patents that Apple owns that covers
23	aspects of the iTunes or iTunes Music Store?
24	MS. SKLENAR: Objection to form, foundation.
25	THE WITNESS: I think there's probably a bunch

1	of other patents that would apply to the iTunes Music				
2	Store.				
3	BY MS. FUKUDA:				
4	Q And going back to Robbin Exhibit 4, again, the				
5	patent that sorry. Wrong one.				
6	Let's look at Robbin Exhibit 7. It's the '242				
7	patent, method and system for network-based purchase and				
8	distribution of media.				
9	You remember earlier that patent owner's				
10	counsel had pointed you to a set of claims in a				
11	purported patent application to this patent?				
12	A Yes.				
13	Q I'm going to ask you to turn to the claims of				
14	the '242 patent, and that starts on column 27 of the				
15	patent.				
16	A Am I in the wrong place? Here?				
17	Q '242, yeah, column 27. It's the receipt				
18	starts with claim 1.				
19	I'm just going to ask you to look very quickly				
20	at independent claim 1 and all the elements in there,				
21	and when you have had a chance to look through that, let				
22	me know.				
23	A Okay.				
24	Q Can you question for you: Is claim 1				
25	does that accurately reflect one of the aspects of				

Apple's invention claimed in this patent? 1 2 MS. SKLENAR: Objection; form, foundation. 3 THE WITNESS: Yes. BY MS. FUKUDA: 4 5 And just in the interest of time, I will point 0 out independent claim 27 as well, and I'll have the same 6 7 questions regarding that. 8 А Okay. 9 And, Mr. Robbin, does claim 27 of the '242 0 10 patent -- is that also -- does that also accurately 11 reflect one of the aspects of Apple's invention claimed 12 in this patent? 13 А Yes. MS. SKLENAR: Objection; form, foundation. 14 15 MS. FUKUDA: Thank you, Mr. Robbin. 16 MS. SKLENAR: No further questions. Thank you. (Discussion off the record.) 17 18 MS. FUKUDA: For the record, I'm going to 19 designate this transcript as "Outside Counsels' Eyes 20 Only" until a heightened PO can be worked out between 21 the parties. And, at that point, we can more 2.2 specifically point to the sections that we want 23 protected under the heightened PO. 24 MS. SKLENAR: Well, we don't agree that that's 25 necessary or appropriate.

1	MS. FUKUDA: But you do agree there's an			
2	interim agreement that we will do so until we have			
3	worked out the terms.			
4	MS. SKLENAR: I agree you can provisionally			
5	designate it to "Outside Counsels' Eyes Only," yes, I			
6	agree to that.			
7	MS. FUKUDA: Okay. Thank you.			
8	(Whereupon, the deposition was concluded at			
9	11:48 a.m.)			
10	000			
11	I declare under penalty of perjury that the			
12	foregoing is true and correct. Subscribed at			
13	, California, this day of			
14	, 2014.			
15				
16				
17	Signature of the witness			
18				
19				
20				
21				
22				
23				
24				
25				

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#### JEFFREY ROBBIN - 4/4/2014

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#### CERTIFICATE OF REPORTER

I, RACHEL FERRIER, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause;

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I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: April 4, 2014

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**PAGE 000120** 

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April 4, 2014

Jeffrey Robbin c/o Ching-Lee Fukuda, Esq. Ropes & Gray 1211 Avenue of the Americas New York, New York 10036

*Re:* Apple Inc. vs. Sightsound Technologies, LLC (Case CBM2013-00020; Case CBM2013-00023; Patent 5,191,573)

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for thirty (30) days in accordance with Federal Rules of Civil Procedure Section 30 (e).

If you are represented by counsel in this matter, you may wish to ask your attorney how to proceed.

Thank you for your cooperation in this matter.

Very truly yours,

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Valentine Untalan Litigation Support

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# EXHIBIT 1

Case CBM2013-00020 U.S. Patent No. 5,191,573

Filed on behalf of Petitioner Apple Inc.

By: Steve J. Baughman Ching-Lee Fukuda James R. Batchelder ROPES & GRAY LLP

1-6969	EXHIBIT	
AD 800-63	1	
PENG	44414	

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE PATENT TRIAL AND APPEAL BOARD

# APPLE INC. Petitioner

v.

# SIGHTSOUND TECHNOLOGIES, LLC Patent Owner

Case CBM2013-00020 U.S. Patent No. 5,191,573

Before the Honorable MICHAEL P. TIERNEY, JUSTIN T. ARBES, and GEORGIANNA W. BRADEN, Administrative Patent Judges

# **DECLARATION OF JEFFREY ROBBIN**

MAIL STOP PATENT BOARD Patent Trial and Appeal Board United States Patent and Trademark Office Post Office Box 1450 Alexandria, Virginia 22313-1450

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# Apple Exhibit 4258 Apple v. SightSound Technologies

I, Jeffrey Robbin, declare:

1. I am employed by Apple Inc. ("Apple") as Vice President, iTunes and Apple TV. I am over the age of 18, I have personal knowledge of the facts set forth herein, and I am competent to testify regarding these facts.

2. In my current capacity at Apple, my responsibilities include overseeing the development of the iTunes client and setting product direction. The iTunes client is the software that runs on Microsoft Windows or (Mac) OS X computers and iOS devices that, in addition to other functions, provides users with access to the iTunes Store.

3. I began working at Apple as an intern in 1992 and returned full time in 1993. In 1997, I left Apple and later started the company SoundStep. While at SoundStep, I, along with Bill Kincaid and David Heller, developed the software product SoundJam MP, a music player product for the Mac. SoundJam MP, among other things, allowed users to play music, transfer music from their computers to MP3 players, create playlists, and transfer music from CDs to their computers and convert to MP3 format.

4. In September 2000, Apple acquired SoundStep, and I returned to Apple as part of the acquisition. I was employed as an engineer to continue my work on SoundJam MP, which was the predecessor product to iTunes. I was responsible, along with Mr. Kincaid and Mr. Heller, for the development of the iTunes client. iTunes commercially launched in January 2001.

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-2-

5. Prior to March 2002, I became involved in developing a music purchase service for Apple, which became the iTunes Music Store, currently known as the iTunes Store.

6. I was one of the leaders of the initial development team for the iTunes Music Store. An internal demonstration version of the iTunes Music Store was available by the end of 2002. The iTunes Music Store officially launched on April 23, 2003.

7. The iTunes client and iTunes Music Store include many technological features developed by Apple. One example is the "Genius" feature, which, among other functions, implements a sophisticated algorithm to provide recommendations based on past purchases. Apple has been granted U.S. patents on many inventions relating to the iTunes Music Store, including user interface technology, playlist management, presentation of media on a device, secure access to content, and assigning ratings. For example, Apple patents for which I am one of the named inventors include U.S. Patent No. 7,853,893 relating to a graphical user interface for searching, browsing, previewing, and/or purchasing media items; U.S. Patent No. 6,728,729 relating to accessing media across networks; U.S. Patent No. 7,765,326 relating to improved interaction between a host computer and a media player; U.S. Patent No. 7,797,446 relating to automatic updating of playlists; U.S. Patent No. 7,827,259 relating to selecting and presenting media items at a media device; U.S. Patent No. 7,844,498 relating to interacting with an online media store to obtain a

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media asset bundle; U.S. Patent No. 7,895,661 relating to secure access to content within media files; U.S. Patent No. 7,958,441 relating to management of playlists; and U.S. Patent No. 8,046,369 relating to assigning ratings to media assets. Apple also has been granted many other patents, for which I am not a named inventor, for innovative features of the iTunes client and iTunes Store.

8. To my recollection, I had not heard of, nor was I aware of, any SightSound entity or any services offered by any SightSound entity before 2003. I also have no recollection of any communication from either Tom Weyer or Mark Gavini (now Marco Mazzoni) relating to SightSound or to the concept of electronic putchase of digital audio or video signals over telecommunication lines. Nor am I aware of anyone in the development team for the launch of the iTunes Music Store, including Mr. Heller, who knew anything about SightSound or its services prior to 2003, or had such communication from either Mr. Weyer or Mr. Gavini (now Mr. Mazzoni). As one of the leaders of the development team for the iTunes Music Store, if anyone had heard of SightSound or received any information about SightSound that related to the iTunes Music Store, I believe I would have been aware of it.

9. I am informed that SightSound is alleging in this proceeding—more than 10 years after Apple developed and launched the iTunes Music Store—that Apple developed the iTunes client and iTunes Music Store by copying from SightSound. Based on my knowledge and experience as a key member of the development team for the iTunes client and the iTunes Music Store, that allegation is utterly false. Apple

41402588 2

-4-

developed those technologies based on the predecessor product SoundJam MP that it acquired in September 2000, and based on the significant innovative work done at Apple to make commercially viable the idea—prevalent in the industry since the mid-1980s—that it would be desirable to sell music and video files over computer networks. Apple's work on this project was both innovative and pioneering, which helps to explain why Apple became the market leader so soon after its launch of the iTunes Music Store. Based on my core involvement in this project, and my extensive, sustained interaction with all of the other team members in developing the iTunes ecosystem, Apple did not copy anything from any SightSound entity.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

-5-

Dated: March <u>6</u>, 2014

Hall-Ieffrey Robbin

# EXHIBIT 2

Case CBM2013-00023 U.S. Patent No. 5,966,440

Filed on behalf of Petitioner Apple Inc.

By: Steve J. Baughman Ching-Lee Fukuda James R. Batchelder ROPES & GRAY LLP

EXHIBIT

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE PATENT TRIAL AND APPEAL BOARD

# APPLE INC. Petitioner

v.

# SIGHTSOUND TECHNOLOGIES, LLC Patent Owner

Case CBM2013-00023 U.S. Patent No. 5,966,440

Before the Honorable MICHAEL P. TIERNEY, JUSTIN T. ARBES, and GEORGIANNA W. BRADEN, Administrative Patent Judges

# **DECLARATION OF JEFFREY ROBBIN**

MAIL STOP PATENT BOARD Patent Trial and Appeal Board United States Patent and Trademark Office Post Office Box 1450 Alexandria, Virginia 22313-1450

> Apple Exhibit 4413 Apple v. SightSound Technologies CBM2013-00023 Page 00001

#### 41491581\_1

I, Jeffrey Robbin, declare:

1. I am employed by Apple Inc. ("Apple") as Vice President, iTunes and Apple TV. I am over the age of 18, I have personal knowledge of the facts set forth herein, and I am competent to testify regarding these facts.

2. In my current capacity at Apple, my responsibilities include overseeing the development of the iTunes client and setting product direction. The iTunes client is the software that runs on Microsoft Windows or (Mac) OS X computers and iOS devices that, in addition to other functions, provides users with access to the iTunes Store.

3. I began working at Apple as an intern in 1992 and returned full time in 1993. In 1997, I left Apple and later started the company SoundStep. While at SoundStep, I, along with Bill Kincaid and David Heller, developed the software product SoundJam MP, a music player product for the Mac. SoundJam MP, among other things, allowed users to play music, transfer music from their computers to MP3 players, create playlists, and transfer music from CDs to their computers and convert to MP3 format.

4. In September 2000, Apple acquired SoundStep, and I returned to Apple as part of the acquisition. I was employed as an engineer to continue my work on SoundJam MP, which was the predecessor product to iTunes. I was responsible, along with Mr. Kincaid and Mr. Heller, for the development of the iTunes client. iTunes commercially launched in January 2001.

41491581\_1

-2-

5. Prior to March 2002, I became involved in developing a music purchase service for Apple, which became the iTunes Music Store, currently known as the iTunes Store.

6. I was one of the leaders of the initial development team for the iTunes Music Store. An internal demonstration version of the iTunes Music Store was available by the end of 2002. The iTunes Music Store officially launched on April 23, 2003.

7. The iTunes client and iTunes Music Store include many technological features developed by Apple. One example is the "Genius" feature, which, among other functions, implements a sophisticated algorithm to provide recommendations based on past purchases. Apple has been granted U.S. patents on many inventions relating to the iTunes Music Store, including user interface technology, playlist management, presentation of media on a device, secure access to content, and assigning ratings. For example, Apple patents for which I am one of the named inventors include U.S. Patent No. 7,853,893 relating to a graphical user interface for searching, browsing, previewing, and/or purchasing media items; U.S. Patent No. 6,728,729 relating to accessing media across networks; U.S. Patent No. 7,765,326 relating to improved interaction between a host computer and a media player; U.S. Patent No. 7,797,446 relating to automatic updating of playlists; U.S. Patent No. 7,827,259 relating to selecting and presenting media items at a media device; U.S. Patent No. 7,844,498 relating to interacting with an online media store to obtain a

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media asset bundle; U.S. Patent No. 7,895,661 relating to secure access to content within media files; U.S. Patent No. 7,958,441 relating to management of playlists; and U.S. Patent No. 8,046,369 relating to assigning ratings to media assets. Apple also has been granted many other patents, for which I am not a named inventor, for innovative features of the iTunes client and iTunes Store.

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I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: March \_6, 2014

Jeffrey Robbin

# EXHIBIT 3



# Steve Jobs In His Own Words

EDITED BY GEORGE BEAHM



# I Steve Jobs In His Own Words



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I, STEVE

#### iTunes

Napster and Kazaa certainly demonstrated that the Internet was built perfectly for delivering music. The problem is they're illegal. And the services that have sprung up that were legal are pretty anemic in terms of the rights they offer you, and they kind of treat you like a criminal. You can't burn a CD, or you can't put it on your MP3 player. And so our idea was to come up with a music service where you don't have to subscribe to it. You can just buy music at 99 cents a song, and you have great digital—you have great rights to use it. You can burn as many CDs as you want for personal use, you can put it on your iPods, you can use it in your other applications, you can have it on multiple computers.

-Apple keynote address, September 12, 2006

# EXHIBIT 4



US007958441B2

# (12) United States Patent

## Heller et al.

#### (54) MEDIA MANAGEMENT FOR GROUPS OF MEDIA ITEMS

- Inventors: David Heller, San Jose, CA (US);
   Jeffrey L. Robbin, Los Altos, CA (US);
   Steven P. Jobs, Palo Alto, CA (US);
   Timothy Wasko, High River (CA); Jeff
   Miller, Mountain View, CA (US)
- (73) Assignee: Apple Inc., Cupertino, CA (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 488 days.
- (21) Appl. No.: 11/097,591
- (22) Filed: Apr. 1, 2005

#### (65) **Prior Publication Data**

US 2006/0156236 A1 Jul. 13, 2006

#### Related U.S. Application Data

- (60) Provisional application No. 60/642,334, filed on Jan. 7, 2005.
- (51) Int. Cl. *G06N 3/00* (2006.01)

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## (10) Patent No.: US 7,958,441 B2

### (45) **Date of Patent:** Jun. 7, 2011

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Primary Examiner ---- Kyle R Stork

EP

#### (57) ABSTRACT

Improved techniques to utilize and manage a group of media items (or media assets) on a computing device are disclosed. The group of media items can be utilized and managed at a host computer for the host computer as well as a media device (e.g., media player) that can couple to the host computer. One popular example of a group of media items is know as a playlist, which can pertain to a group of audio tracks. One aspect pertains to a graphical user interface that enables a user to trade-off storage capacity of a media device between media asset storage and data storage. Another aspect pertains to a graphical user interface that assists a user with selecting media items to fill a group of media items. Still another aspect pertains to providing a persistent media device playlist at a host computer. Yet still another aspect pertains to imposing capacity limits to a playlist, such as a media device playlist.

#### 28 Claims, 11 Drawing Sheets



Apple Exhibit 4447 Apple v. SightSound Technologies CBM2013-00023 Page 00001

# PAGE 000164

EXHIBIT

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FIG. 3



FIG. 4

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# FIG. 6



FIG. 7

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FIG. 9

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FIG. 10

#### MEDIA MANAGEMENT FOR GROUPS OF MEDIA ITEMS

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to U.S. Provisional Application No. 60/642,334, filed Jan. 7, 2005, and entitled "MEDIA MANAGEMENT FOR GROUPS OF MEDIA ITEMS," which is hereby incorporated herein by reference. 10

This application is related to: (i) U.S. application Ser. No. 11/097,034, filed concurrently, and entitled "PERSISTENT GROUP OF MEDIA ITEMS FOR A MEDIA DEVICE,' which is hereby incorporated herein by reference; (ii) U.S. application Ser. No. 10/973,925, filed Oct. 25, 2004, and 15 entitled "MULTIPLE MEDIA TYPE SYNCHRONIZA-TION BETWEEN HOST COMPUTER AND MEDIA DEVICE," which is hereby incorporated herein by reference; (iii) U.S. patent application Ser. No. 10/833,879, filed Apr. 27, 2004, and entitled "METHOD AND SYSTEM FOR 20 SHARING PLAYLISTS," which is hereby incorporated by reference herein; (iv) U.S. patent application Ser. No. 10/833, 399, filed Apr. 27, 2004, and entitled "METHOD AND SYS-TEM FOR CONFIGURABLE AUTOMATIC MEDIA SELECTION," which is hereby incorporated by reference 25 herein; (v) U.S. patent application Ser. No. 10/277,418, filed Oct. 21, 2002, and entitled "INTELLIGENT INTERAC-TION BETWEEN MEDIA PLAYER AND HOST COM-PUTER," which is hereby incorporated herein by reference; (vi) U.S. patent application Ser. No. 10/198,639, filed Jul. 16, 30 2002, and entitled "METHOD AND SYSTEM FOR UPDAT-ING PLAYLISTS," which is hereby incorporated by reference herein; and (vii) U.S. patent application Ser. No. 10/118, 069, filed Apr. 5, 2002, and entitled "INTELLIGENT SYNCHRONIZATION OF MEDIA PLAYER WITH HOST 35 COMPUTER," which is hereby incorporated herein by reference.

#### BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to media devices and, more particularly, to management of media on media devices.

2. Description of the Related Art

A media player stores media assets, such as audio tracks or 45 photos, that can be played or displayed on the media player. One example of a media player is the iPod® media player, which is available from Apple Computer, Inc. of Cupertino, Calif. Often, a media player acquires its media assets from a host computer that serves to enable a user to manage media 50 assets. As an example, the host computer can execute a media management application to manage media assets. One example of a media management application is iTunes®, version 4.2, produced by Apple Computer, Inc.

Media assets can be moved between the host computer and 55 the media player through use of a manual drag and drop operation, or through an automatic synchronization once a bus connection over a peripheral cable connects the media player to the host computer. Additional details on automatic synchronization are provided in U.S. Patent Publication No.: 60 2003/0167318 A1, which is hereby incorporated herein by reference.

In managing media assets, a user can create playlists for audio tracks. These playlists can be created at the host computer. Media assets within the playlists can then be copied to 65 the media player. Often, the amount of media assets at the host computer exceeds the storage capacity of the media player. In

such case, the user of the host computer can select a subset of the media assets at the host computer to be copied to the media player. For example, a user might select certain playlists to be copied to the media player when synchronized.

Conventionally, a media player is considered a media source for a media management application so long as the media player is connected to the host computer. That is, once the media management application detects the media player, a visual representation of the media player can be displayed. However, once the media player is disconnected, the visual representation of the media player is removed. Hence, media assets, namely, playlists of media assets, on the media player can be managed at the host computer only while the media player is connected to its host computer. In particular, if the media player is not a media source and, therefore, its media

assets cannot be managed at the host computer. This can be a disadvantage for users that want to manage the media assets provided on the media player from the host computer. Thus, there is a need for improved techniques to facilitate

management and usage of media assets for media devices.

#### SUMMARY OF THE INVENTION

Broadly speaking, the invention pertains to improved techniques to utilize and manage a group of media items (or media assets) on a computing device. The group of media items can be utilized and managed at a host computer for the host computer as well as a media device (e.g., media player) that can couple to the host computer. One popular example of a group of media items is known as a playlist, which can pertain to a group of audio tracks.

One another aspect of the invention pertains to a graphical user interface that enables a user to trade-off storage capacity of a media device between media asset storage and non-media asset storage. Another aspect of the invention pertains to a graphical user interface that assists a user with selecting media items to fill a group of media items. Still another aspect of the invention pertains to providing a persistent media device playlist at a host computer. The persistent media device that can couple to the host computer. Another aspect of the invention pertains to imposing capacity limits to a playlist, such as a media device playlist.

The invention can be implemented in numerous ways, including as a method, system, device, apparatus (including graphical user interface), or computer readable medium. Several embodiments of the invention are discussed below.

As a method of providing audio tracks for a playlist for use on a host computer and a media device, still another embodiment of the invention includes at least the acts of: displaying a listing of audio tracks that are within the playlist on a display screen of the host computer, all of the audio tracks being stored locally on the host computer and at least a portion of the audio tracks being stored on the media device; obtaining a capacity limit for the playlist; receiving a user selection to fill the playlist with additional audio tracks to the capacity limit after the user selection is received.

As a graphical user interface for providing audio tracks for a playlist for use by a host computer and a media device, one embodiment of the invention includes at least: a list of audio tracks that are within the playlist, the list being displayed on a display device of the host computer, and a selectable user interface control displayed on the display device of the host computer, the selectable user interface control, upon selection, initiates a filling of the playlist with audio tracks.

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As a graphical user interface provided on a host computer for reserving storage capacity of a media device, one embodiment of the invention includes at least: a user selection control that enables a user of the host computer to reserve a portion of the storage capacity of the media device for storage of nonaudio track data.

As a computer readable medium including at least computer program code for providing media items for a media item grouping for use on a host computer and a media device, one embodiment of the invention includes at least: computer <sup>10</sup> program code for displaying a listing of media items that are within the media item grouping on a display screen of the host computer, all of the media items being stored locally on the host computer and at least a portion of the media items being stored on the media device; computer program code for <sup>15</sup> obtaining a capacity limit for the media item grouping; computer program code for receiving a user selection to fill the media item grouping with additional media item grouping with additional media items to the capacity limit after the user <sup>20</sup> selection is received.

Other aspects and advantages of the invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be readily understood by the following detailed description in conjunction with the accompanying <sup>30</sup> drawings, wherein like reference numerals designate like structural elements, and in which:

FIG. 1 is a flow diagram of a host-based media source management process according to one embodiment of the invention.

FIG. 2 is a flow diagram of a playlist management process according to one embodiment of the invention.

FIG. 3 is a flow diagram of a status indication process according to one embodiment of the invention.

FIG. **4** is a flow diagram of an update process according to 40 one embodiment of the invention.

FIG. 5 is a screen shot of a media management application window according to one embodiment of the invention.

FIG. 6 is a screen shot of a preference window for a media management application according to one embodiment of the 45 invention.

FIG. 7 if a flow diagram of a group fill process according to one embodiment of the invention.

FIGS. 8A and 8B are flow diagrams of a playlist fill process according to one embodiment of the invention. 50

FIG. 9 is a block diagram of a media management system according to one embodiment of the invention.

FIG. 10 is a block diagram of a media player according to one embodiment of the invention.

#### DETAILED DESCRIPTION OF THE INVENTION

The invention pertains to improved techniques to utilize and manage a group of media items (or media assets) on a computing device. The group of media items can be utilized 60 and managed at a host computer for the host computer as well as a media device (e.g., media player) that can couple to the host computer. One popular example of a group of media items is known as a playlist, which can pertain to a group of audio tracks. 65

One another aspect of the invention pertains to a graphical user interface that enables a user to trade-off storage capacity of a media device between media asset storage and non-media asset storage. Another aspect of the invention pertains to a graphical user interface that assists a user with selecting media items to fill a group of media items. Still another aspect of the invention pertains to providing a persistent media device playlist at a host computer. The persistent media device playlist represents a playlist dedicated to a media device that can couple to the host computer. Another aspect of the invention pertains to imposing capacity limits to a playlist, such as a media device playlist.

Embodiments of the invention are discussed below with reference to FIGS. **1-10**. However, those skilled in the art will readily appreciate that the detailed description given herein with respect to these figures is for explanatory purposes as the invention extends beyond these limited embodiments.

FIG. 1 is a flow diagram of a host-based media source management process 100 according to one embodiment of the invention. Typically, the host-based media source management process 100 is performed by a host computer for the benefit of not only the host computer but also a media device. Often, the host-based media source management process 100 operates following a request by a user of the host computer.

The host-based media source management process 100 25 initially displays 102 a media source indicator for a media source that is associated with a media device. Then, a representation of media items that are within the media source are displayed 104. The media items within the media source can then be managed 106 by adding or removing media items to 30 or from the media source. Following the block 106, the hostbased media source management process 100 is complete and ends.

In one embodiment, the media source pertains to a media device playlist. A media device playlist is a playlist that is dedicated to a particular media device. That is, the media items present on the media device should closely correspond to the media items in the media device playlist. Typically, a host computer can manage the media device playlist for both the host computer and the media device. The media items can pertain to one or more different types of media content. In one embodiment, the media items are images (e.g., photos). However, in other embodiments, the media items can be any combination of audio, graphical or video content.

A playlist identifies particular media items that are to be played in a sequence. In general, a playlist can be considered an ordered list of media items. Internally, according to one embodiment, the playlist can be represented in a media database as a data structure that points to files of the appropriate media items residing on the storage device within the media device. Hence, for a given playlist, the pointers to the files of the appropriate media items on the media device will differ from the pointers to the files for the same media items on the host computer, thus the need to update the pointers if a par-50 ticular playlist is moved between the host computer and the media device.

FIG. 2 is a flow diagram of a playlist management process 200 according to one embodiment of the invention. The playlist management process 200 is, for example, performed by a host computer, such as a host computer performing a media management application. The playlist management process 200 serves to manage media not only on the host computer but also on a portable media device that can connect to the host computer.

The playlist management process 200 initially displays 202 a media device playlist indicator. A decision 204 then determines whether the playlist indicator has been selected.
Here, a user of the host computer can cause the playlist indicator to be selected. When the decision 204 determines that the playlist indicator has not yet been selected, then other processing 206 can optionally be performed. Following the other processing 206, if any, the playlist management process 5 200 returns to repeat the decision 204 and subsequent blocks.

On the other hand, when the decision 204 determines that the playlist indicator has been selected, then a list of audio tracks that are within the media device playlist are displayed 208. After the list of audio tracks is displayed 208, the user of 10 the host computer can interact with the list of audio tracks to either add or delete audio tracks from the media device playlist. In this regard, a decision 210 determines whether user interaction has requested to add or delete audio tracks to or from the media device playlist. When the decision 210 deter- 15 mines that no such user interaction has been requested, other processing 212 can optionally be performed. Following the other processing 212, if any, the playlist management process 200 returns to repeat the decision 210 and subsequent blocks. Once the decision 210 determines that user interaction has 20 requested to add or delete audio tracks with respect to the media device playlist, then the media device playlist is updated 214. Then, the updated list of audio tracks that are within the media device playlist are displayed 216.

Next, a decision 218 then determines whether an associ- 25 ated media device is connected to the host computer. When the decision 218 determines that the media device is connected to the host computer, then audio tracks to be stored on the media device are updated 220. In other words, the additions and/or deletions of audio tracks can be performed to 30 affect update of the audio tracks stored at the media device. On the other hand, when the decision 218 determines that the associated media device is not connected to the host computer, update of audio tracks to be stored on the media device is deferred 222. In other words, if the associated media device 35 is "off-line" with respect to the host computer, the update to the audio tracks stored on the media device is deferred until a later point in time when the media device is "on-line" with respect to the host computer. For example, the update of the audio tracks stored on the media device can be deferred 222 40 until the media device is next connected to the host computer. Following the blocks 220 and 222, a decision 224 determines whether the media device playlist is unselected. When the media device playlist is unselected, the playlist management process 200 for the media device playlist ends. On the other 45 hand, when the decision 224 determines that the media device playlist remains selected, the playlist management process 200 can return to repeat the decision 210 and subsequent operations so that management of the media device playlist can continue.

FIG. **3** is a flow diagram of a status indication process **300** according to one embodiment of the invention. The status indication processed **300** represents additional processing that can be performed to provide status indication information for each of the audio tracks being listed in a media device 55 playlist. The status indication process **300** is, for example, performed at block **208** of the playlist management process **200** illustrated in FIG. **2**.

The status indication process 300 initially obtains 302 the audio tracks that are within the media device playlist. Then, 60 the status indication process 300 determines 304 which of the audio tracks are present on the media device. The audio tracks can then be displayed 306 in a list on a display screen of the host computer. Additionally, an indicator for each of the audio tracks can be displayed 308 to indicate its presence on the 65 media device. Following the block 308, the status indication processed 300 ends.

Often, all the audio tracks in the list being displayed 306 are also present in the media device. However, in various circumstances, one or more audio tracks are not present on the media device. As an example, if the media were disconnected before it could receive be updated with additional audio tracks, then the indicator displayed 308 at the host computer would indicate that such additional audio tracks are not present on the media device. As another example, if one audio track were added to the media device playlist at the host computer, but such audio track was not permitted to be copied elsewhere, then the indicator displayed 308 at the host computer would again indicate that such audio track was not present on the media device.

FIG. 4 is a flow diagram of an update process 400 according to one embodiment of the invention. The update process 400 is performed by a host computer which serves to update the media device playlist stored on media device. The update process 400 represents one embodiment for the update 214 of the media device playlist discussed above with reference to FIG. 2.

The update process 400 begins with a decision 402 that determines whether one or more audio tracks are to be deleted from the media device playlist. When the decision 402 determines that one or more audio tracks are to be deleted from the media device playlist, then the media device playlist is updated 404 by deleting the one or more audio tracks. Following the block 404, or directly following the decision 402 when the decision 402 to determines that one or more audio tracks are not to be deleted, a decision 406 determines whether one or more audio tracks are to be added to the media device playlist. When the decision 406 determines that one or more audio tracks are to be added to the media device playlist, then a capacity limit for the media device playlist is determined 408. The capacity limit for the media device playlist can be established in a variety of different ways. In one embodiment, the capacity limit for the media device playlist is determined by the storage capacity of the media device. In another embodiment, the capacity limit for the media device playlist can be set by a user of the host computer, such as via a media management application operating on the host computer.

In any case, after the capacity limit for the media device playlist has been determined 408, a decision 410 determines whether the capacity limit would be exceeded if the one or more audio tracks are added to the media device playlist. When the decision 410 determines that the capacity limit would not be exceeded if the one or more audio tracks were added to the media device playlist, then the media device playlist can be updated 412 by adding the one or more audio tracks. Alternatively, when the decision 410 determines that the capacity limit for the media device playlist would be exceeded if the one or more audio tracks were added to the media device playlist, then the user can be informed 414 that insufficient space prevented adding of the one or more audio tracks to the media device playlist. Following the blocks 412 and 414, as well as following the decision 406 when no audio tracks are to be added, the update process 400 ends.

In another embodiment, the update process 400 can operate differently when the decision 410 determines that the capacity limit for the media device playlist would be exceeded if the one or more audio tracks were added to the media device playlist. For example, instead of merely informing 414 the user that insufficient space prevented adding of the one or more audio tracks to the media device playlist, the update process 400 could permit the additions at the host computer following the informing 414 which would provide a warning.

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However, in such an embodiment, the subsequent update **220** of the media device would not operate to copy excess media items to the media device. Status indicators, such as described above with reference to FIG. **3**, could be used to designate the excess media items at the host computer's version of the 5 media device playlist but not on the media device itself.

FIG. 5 is a screen shot of a media management application window 500 according to one embodiment of the invention. The media management application window 500 is, for example, produced by a media management application oper- 10 ating on a host computer.

The media management application window 500 includes a source region 502 and a track listing area 504. The source region 502, among other things, depicts a media device indicator 506. The media device indicator 506 corresponds to a 15 media device playlist. In this example, the media device indicator 506 is a graphic icon. Additionally, the media device indicator 506 can also include a text description. In this example, the media device indicator 506 also provides the text "iPod". The track listing area 504 includes a list of audio 20 tracks 508 together with associated status indicators 510 and 511. The list of audio tracks 508 are those audio tracks associated with the media device playlist. As shown in FIG. 5, each of the audio tracks within the list of audio tracks 508 include a corresponding one of the status indicators 510. In 25 this example, the status indicators 510 are all shown being "checked," thus indicating that the associated audio tracks are to be played when playing through the audio tracks within the list of audio tracks 508. Alternatively, with the status indicator 510 "unchecked" the associated audio track is skipped (i.e., 30 not played) played when playing through the audio tracks within the list of audio tracks 508. Further, each of the audio tracks within the list of audio tracks 508 can also include a corresponding one of the status indicators 511. In this example, the status indicator 511 is being display adjacent to 35 only the audio tracks 9, 10 and 11 of the list of audio tracks 508. The status indicator 511 in this example indicates that the corresponding audio track has not yet been copied to the associated media device. Typically, the media management application will copy all of the audio tracks within the list of 40 audio tracks 508 to the media device once the media device connects to the host computer. However, in the event that certain ones of the audio tracks within the list of audio tracks 508 are not currently present on the media device, the status indicator 511 associated with the certain ones of the audio 45 tracks would be displayed.

The track listing area 504 also presents certain information pertaining to each of the audio tracks. As shown in FIG. 5, the certain information can pertain to song name 514, duration of time of the audio track 514, artist name 516, and album name 50 518. Additionally, the track listing area 504 also includes "go to" links 520 and 522 for each of the audio tracks. Each of the "go to" links 520 direct the user to an album page for an album including the associated audio track (song). Each of the "go to" links 522 directs the user to an artist page associated with 55 the artist identified by the artist name 516. As shown in FIG. 5, the "go to" links can be implemented as small buttons with arrow symbols therein.

Furthermore, as discussed below, the media management application window 500 further includes a fill control region 60 540. The fill control region 540 includes an Autofill button 542 that can be selected by a user. Additionally, the fill control region 540 provides graphical user interface control items that can be selected or manipulated by the user to affect the nature of an autofill operation once the Autofill button 542 is 65 pressed. Namely, the fill control region 540 includes a source selector 544 so that a source of media from which the autofill

operation is to be performed can be selected. In addition, the fill control region **540** includes selectors **546-550** that enable the user to select certain features. For example, the selector **546** allows a user to determine whether existing songs are to be replaced when autofilling the media device playlist. The selector **548** determines whether songs are to be randomly chosen when performing the autofill operation. The selector **550** determines whether higher-rated songs (e.g., user ratings) are to be chosen when performing the autofill operation. Still further, the fill control region **540** can display an indication **552** of an amount of available storage capacity for the media device.

In general, the autofill region 540 assists a user in providing criteria for media selection when autofilling. Although the fill control region 540 includes the selectors 548 and 550, different or additional selectors or other types of controls can be utilized. These additional controls can also be used to specify criteria for selecting audio tracks (i.e., songs) when autofilling the media device playlist. Some examples of these additional selectors or controls are associated with criteria such as: artist, album, composer, bit rate, date added (e.g., recently added), genre, play count, name, year, etc. A user can also define the rules or conditions for determining audio tracks to be selected when autofilling. The rules or conditions can include rule components, such as: contains, does not contain, is, is not, starts with, ends with, in the range, etc. Besides criteria controls and rules, importance selectors (e.g., sliders) or other controls permit a user to further control how the audio tracks are selected when autofilling. For example, a criteria selection based on user ratings as well as an importance value from an importance selector (e.g., slider) can be set to influence which audio tracks are to be selected from a source of media. However, the particular order in which such audio tracks are acquired can still be is partially randomly determined or can be determined based on the criteria (date added) or rules.

FIG. 6 is a screen shot of a preference window 602 for a media management application according to one embodiment of the invention. In this embodiment, the media management application is able to set preferences that determine how a media device operates to store data. Namely, in this example, the media device is known as the iPod® media player, which is available from Apple Computer, Inc. Here, the preference window 602 includes a selector 604 that enables the user to determine whether the media device is permitted to be used as a portable disk drive for data storage. Here, the data storage when being used as a portable storage disk would be distinct from storage of media content, such as media content of a media device playlist.

The preference window 602 also includes a graphical user interface control 606 that assists the user in specifying how much of the available storage capacity of the media device should be used for data as well as how much of the storage capacity should be used for media items, such as audio tracks or songs. In one embodiment, the graphical user interface control 606 is a slider such as shown in FIG. 6. The slider shown in FIG. 6 can be manipulated by the user to trade-off the number of media items (e.g., 27 songs) that can be stored to the media device with the amount of other data (e.g., 151 MB) that can be stored. As a slider reference 608 is manipulated by the user along a slider bar 610, the number of songs and the amount of data change. For example, if the user were to move the slider reference 608 to the left as shown in FIG. 6. the number of songs depicted would increase to a value greater than 27, while the amount of other data would decrease below 151 MB. For ease of computation, in one embodiment, each song can be considered 1 MB or some

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other predetermined representative size. Stated differently, the slider shown in FIG. 6 can be manipulated by the user to trade-off the amount of media item storage available on the media device with the amount of non-media item storage available on the media device.

FIG. 7 if a flow diagram of a group fill process 700 according to one embodiment of the invention. The group fill processed 700 is, for example, performed by a host computer that operates a media management application that is able to allow users to group media items.

The group fill process 700 initially displays 702 a group of media items. Next, a decision 704 determines whether a fill request has been received. When the decision 704 determines that a fill request has not been received, then other processing 706 can be optionally performed. In any case, the group fill 15 process 700 returns to repeat the decision 704 to await a fill request.

Once the decision 704 determines that a fill request has been received, a capacity limit for the group is obtained 708. The capacity limit for the group can be stored on the host 20 computer in one embodiment of the invention. In another embodiment, the capacity limit can be determined at the host computer. In still another embodiment, the capacity limit for the group can be determined based on information provided by a media device coupled to the host computer. In any event, 25 after the capacity limit for the group has been obtained 708, the group fill process 700 operates to automatically fill 710 the group to the capacity limit with additional media items. At this point, the group of media items is deemed full of media items. It should be understood that "filling" the group of media items or consuming the capacity limit does not require that there be no remaining free capacity. For example, in one implementation, the automatic fill 710 can fill the group with as many complete media items as it can hold. In any case, following the automatic fill 710, the group can be re-dis- 35 played 712. Following the re-display 712 of the group, the group fill process 700 is complete. Although the group fill process 700 could end following the re-display 712 of the group, the group fill process 700 can also return to repeat the decision 704 and subsequent operations so that the group fill 40 process can again performed (with or without any intermediate other processing).

One example of a group media items is a playlist. The media items within the playlist are, for example, audio tracks.

FIGS. 8A and 8B are flow diagrams of a playlist fill process 45 800 according to one embodiment of the invention. The playlist fill process 800 initially displays 802 a playlist having initial audio tracks. Next, a decision 804 determines whether a fill request has been received. Here, the fill request is typically from a user of a host computer that operates the playlist 50 fill process 800. When the decision 804 determines that a fill request has not yet been received, other processing 806 can optionally be performed. Following the other processing 806, if any, the playlist fill process 800 returns to repeat the decision 804 and subsequent blocks. 55

Once the decision 804 determines that a fill request has been received, a decision 808 determines whether the initial audio tracks of the playlist are to be replaced. When the decision 808 determines that the initial audio tracks are to be replaced, the initial audio tracks are deleted 810 from the 60 playlist. Alternatively, when the decision 808 determines that the initial audio tracks are not to be replaced, then the block 810 is bypassed.

Following the block 810, or its being bypassed, a source selection is obtained 812. The source selection represents a 65 source for additional media items that can be added to the playlist. In addition, selection criteria preferences can be

obtained **814**. In one embodiment, the selection criteria preferences are preferences, typically set by the user, that specify criteria to be utilized in the selection of the additional media items to fill the playlist. Still further, a capacity limit for the playlist can be obtained **816**. As noted above, the capacity limit can be influenced by user settings and/or media device capacities.

Next, an amount of free capacity for the playlist is determined **818**. In one embodiment, the free capacity for the playlist represents in the difference between the current capacity for the playlist and the capacity limit for the playlist. Once the amount of free capacity has been determined **818**, additional audio tracks to fill the free capacity of the playlist are determined **820** based on the source selection and the selection criteria preferences. Then, the additional audio tracks that have been determined **820** are added **822** to the playlist. Finally, the playlist can be re-displayed **824**. Once re-displayed, the playlist is illustrated with a full complement of audio tracks.

Following the block **824**, the playlist fill process **800** is complete and ends. However, it should be realized that the playlist fill process **800** can be repeated, if desired, so as to obtain different selections of audio tracks within the playlist, provided the source selection has an adequate quantity of audio tracks to be chosen from and provided at least some of the initial audio tracks are being replaced.

In another embodiment, the replacement (i.e., deletion **810**) of initial tracks can be limited to those of the initial audio tracks that have been played since last updated with a host computer. In still another embodiment, the user of the host computer can manually delete one or more of the initial audio tracks from the playlist.

FIG. 9 is a block diagram of a media management system 900 according to one embodiment of the invention. The media management system 900 includes a host computer 902 and a media player 904. The host computer 902 is typically a personal computer. The host computer, among other conventional components, includes a management module 906 which is a software module. The management module 906 provides for centralized management of media items (and/or playlists) not only on the host computer 902 but also on the media player 904. More particularly, the management module 906 manages those media items stored in a media store 908 associated with the host computer 902. The management module 906 also interacts with a media database 910 to store media information associated with the media items stored in the media store 908.

The media information pertains to characteristics or attributes of the media items. For example, in the case of audio or audiovisual media, the media information can include one or more of: title, album, track, artist, composer and genre. These types of media information are specific to particular media items. In addition, the media information can pertain to quality characteristics of the media items. Examples of quality characteristics of media items can include one or more of: bit rate, sample rate, equalizer setting, volume adjustment, start/stop and total time.

Still further, the host computer 902 includes a play module 912. The play module 912 is a software module that can be utilized to play certain media items stored in the media store 908. The play module 912 can also display (on a display screen) or otherwise utilize media information from the media database 910. Typically, the media information of interest corresponds to the media items to be played by the play module 912.

The host computer 902 also includes a communication module 914 that couples to a corresponding communication

module 916 within the media player 904. A connection or link 918 removeably couples the communication modules 914 and 916. In one embodiment, the connection or link 918 is a cable that provides a data bus, such as a FIREWIRE<sup>TM</sup> bus or USB bus, which is well known in the art. In another embodiment, the connection or link 918 is a wireless channel or connection through a wireless network. Hence, depending on implementation, the communication modules 914 and 916 may communicate in a wired or wireless manner.

The media player 904 also includes a media store 920 that stores media items within the media player 904. Optionally, the media store 920 can also store data, i.e., non-media item storage. The media items being stored to the media store 920 are typically received over the connection or link 918 from the host computer 902. More particularly, the management module 906 sends all or certain of those media items residing on the media store 908 over the connection or link 918 to the media store 920 within the media player 904. Additionally, the corresponding media information for the media items that 20 is also delivered to the media player 904 from the host computer 902 can be stored in a media database 922. In this regard, certain media information from the media database 910 within the host computer 902 can be sent to the media database 922 within the media player 904 over the connection 25 or link 918. Still further, playlists identifying certain of the media items can also be sent by the management module 906 over the connection or link 918 to the media store 920 or the media database 922 within the media player 904.

Furthermore, the media player **904** includes a play module <sup>30</sup> **924** that couples to the media store **920** and the media database **922**. The play module **924** is a software module that can be utilized to play certain media items stored in the media store **920**. The play module **924** can also display (on a display screen) or otherwise utilize media information from the media database **922**. Typically, the media information of interest corresponds to the media items to be played by the play module **924**.

Hence, in one embodiment, the media player 904 has lim- 40 ited or no capability to manage media items on the media player 904. However, the management module 906 within the host computer 902 can indirectly manage the media items residing on the media player 904. For example, to "add" a media item to the media player 904, the management module 45 906 serves to identify the media item to be added to the media player 904 from the media store 908 and then causes the identified media item to be delivered to the media player 904. As another example, to "delete" a media item from the media player 904, the management module 906 serves to identify the media item to be deleted from the media store 908 and then causes the identified media item to be deleted from the media player 904. As still another example, if changes (i.e., alterations) to characteristics of a media item were made at the host computer 902 using the management module 906, 55 then such characteristics can also be carried over to the corresponding media item on the media player 904. In one implementation, the additions, deletions and/or changes occur in a batch-like process during synchronization of the media items on the media player 904 with the media items on the host 60 computer 902.

In another embodiment, the media player 904 has limited or no capability to manage playlists on the media player 904. However, the management module 906 within the host computer 902 through management of the playlists residing on the 65 host computer can indirectly manage the playlists residing on the media player 904. In this regard, additions, deletions or

changes to playlists can be performed on the host computer 902 and then by carried over to the media player 904 when delivered thereto.

As previously noted, synchronization is a form of media management. The ability to automatically initiate synchronization was also previously discussed above and in the related application noted above. Still further, however, the synchronization between devices can be restricted so as to prevent automatic synchronization when the host computer and media player do not recognize one another.

According to one embodiment, when a media player is first connected to a host computer (or even more generally when matching identifiers are not present), the user of the media player is queried as to whether the user desires to affiliate, assign or lock the media player to the host computer. When the user of the media player elects to affiliate, assign or lock the media player with the host computer, then a pseudorandom identifier is obtained and stored in either the media database or a file within both the host computer and the media player. In one implementation, the identifier is an identifier associated with (e.g., known or generated by) the host computer or its management module and such identifier is sent to and stored in the media player. In another implementation, the identifier is associated with (e.g., known or generated by) the media player and is sent to and stored in a file or media database of the host computer.

FIG. 10 is a block diagram of a media player 1000 according to one embodiment of the invention. The media player 1000 includes a processor 1002 that pertains to a microprocessor or controller for controlling the overall operation of the media player 1000. The media player 1000 stores media data pertaining to media items in a file system 1004 and a cache 1006. The file system 1004 is, typically, a storage disk or a plurality of disks. The file system 1004 typically provides high capacity storage capability for the media player 1000. The file system 1004 can store not only media data but also non-media data (e.g., when operated in a disk mode). However, since the access time to the file system 1004 is relatively slow, the media player 1000 can also include a cache 1006. The cache 1006 is, for example, Random-Access Memory (RAM) provided by semiconductor memory. The relative access time to the cache 1006 is substantially shorter than for the file system 1004. However, the cache 1006 does not have the large storage capacity of the file system 1004. Further, the file system 1004, when active, consumes more power than does the cache 1006. The power consumption is often a concern when the media player 1000 is a portable media player that is powered by a battery (not shown). The media player 1000 also includes a RAM 1020 and a Read-Only Memory (ROM) 1022. The ROM 1022 can store programs, utilities or processes to be executed in a non-volatile manner. The RAM 1020 provides volatile data storage, such as for the cache 1006.

The media player 1000 also includes a user input device 1008 that allows a user of the media player 1000 to interact with the media player 1000. For example, the user input device 1008 can take a variety of forms, such as a button, keypad, dial, etc. Still further, the media player 1000 includes a display 1010 (screen display) that can be controlled by the processor 1002 to display information to the user. A data bus 1011 can facilitate data transfer between at least the file system 1004, the cache 1006, the processor 1002, and the CODEC 1012.

In one embodiment, the media player **1000** serves to store a plurality of media items (e.g., songs) in the file system **1004**. When a user desires to have the media player play a particular media item, a list of available media items is displayed on the display 1010. Then, using the user input device 1008, a user can select one of the available media items. The processor 1002, upon receiving a selection of a particular media item, supplies the media data (e.g., audio file) for the particular media item to a coder/decoder (CODEC) 1012. The CODEC 5 1012 then produces analog output signals for a speaker 1014. The speaker 1014 can be a speaker internal to the media player 1000 or external to the media player 1000. For example, headphones or earphones that connect to the media player 1000 would be considered an external speaker. 10

The media player 1000 also includes a network/bus interface 1016 that couples to a data link 1018. The data link 1018 allows the media player 1000 to couple to a host computer. The data link 1018 can be provided over a wired connection or a wireless connection. In the case of a wireless connection. 15 the network/bus interface 1016 can include a wireless transceiver.

In one implementation, the host computer can utilize an application resident on the host computer to permit utilization and provide management for playlists, including a media 20 device playlist. One such application is iTunes®, version 4.2. produced by Apple Computer, Inc. of Cupertino, Calif.

Although the media items (or media assets) of emphasis in several of the above embodiments were audio items (e.g., audio files or songs), the media items are not limited to audio 25 items. For example, the media items can alternatively pertain to videos (e.g., movies) or images (e.g., photos).

The various aspects, embodiments, implementations or features of the invention can be used separately or in any combination.

The invention is preferably implemented by software, but can also be implemented in hardware or a combination of hardware and software. The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device 35 that can store data which can thereafter be read by a computer system. Examples of the computer readable medium include read-only memory, random-access memory, CD-ROMs, DVDs, magnetic tape, optical data storage devices, and carrier waves. The computer readable medium can also be dis- 40 tributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

The advantages of the invention are numerous. Different aspects, embodiments or implementations may yield one or 45 more of the following advantages. One advantage of the invention is that a media device playlist can be persistently represented and manipulated at a host computer regardless of whether the associated media device is connected to the host computer. Another advantage of the invention is that a playlist 50 a playlist for use by a host computer and a media device, the can be managed in accordance with a capacity limit. Still another advantage of the invention is that a capacity limit to be imposed on a playlist can be adjusted to provide reserved storage capacity for data storage (e.g., associated with a disk mode usage of the media device). Yet still another advantage 55 of the invention is that a user can initiate a fill operation to cause a playlist to be automatically filled from a larger media source.

The many features and advantages of the present invention are apparent from the written description and, thus, it is 60 intended by the appended claims to cover all such features and advantages of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, the invention should not be limited to the exact construction and operation as illustrated and described. 65 Hence, all suitable modifications and equivalents may be resorted to as falling within the scope of the invention.

What is claimed is:

1. A method of providing audio tracks for a playlist for use on a host computer and a media device, the media device having a storage capacity, said method comprising:

displaying a listing of audio tracks that are within the playlist on a display screen of the host computer, all of the audio tracks being stored locally on the host computer and at least a portion of the audio tracks being stored on the media device;

determining a current capacity for the playlist;

- setting a capacity limit for the playlist, the capacity limit being set to a user-specified amount that is less than the storage capacity of the media device;
- receiving a user selection to initiate automatic filling of the playlist with additional audio tracks;
- comparing the current capacity for the playlist to the capacity limit for the playlist to determine available capacity for the playlist; and
- thereafter automatically filling the playlist with additional audio tracks to the capacity limit in response to the user selection to automatically fill the playlist if the current capacity is less than the capacity limit.

2. A method as recited in claim 1, wherein said filling selects the additional audio tracks from an audio source available to the host computer.

3. A method as recited in claim 1, wherein said filling selects the additional audio tracks from an audio source available to the host computer in a random manner.

4. A method as recited in claim 1, wherein said filling selects the additional audio tracks from an audio source available to the host computer based on a user rating

5. A method as recited in claim 1, wherein said filling comprises:

- (d1) initially removing one or more existing audio tracks from the playlist; and
- (d2) filling the playlist with audio tracks to the capacity limit.

6. A method as recited in claim 5, wherein said filling selects the additional audio tracks from an audio source available to the host computer.

7. A method as recited in claim 5, wherein said filling selects the additional audio tracks from an audio source available to the host computer in a random manner.

8. A method as recited in claim 5, wherein said filling selects the additional audio tracks from an audio source available to the host computer based on a user rating

9. A method as recited in claim 1, wherein the playlist is a dedicated media device playlist for the media device.

10. A graphical user interface for providing audio tracks for host computer including at least a processor and a display device, said graphical user interface comprising:

- a list of audio tracks that are within the playlist, said list being displayed on the display device of the host computer:
- a fill criteria control that is user-selectable and used to specify at least one user-selected fill criteria; and
- a selectable user interface control displayed on the display device of the host computer, said selectable user interface control, upon selection, initiates an automated filling of the playlist with selected ones of the audio tracks being chosen in accordance with the at least one userselected fill criteria,

wherein the playlist has a capacity limit, and

wherein the capacity limit is set to a user-specified amount that is less than the storage capacity of the media device, and

wherein the automated filling of the playlist is to the capacity limit.

11. A graphical user interface as recited in claim 10, wherein said selectable user interface control is a button.

**12.** A graphical user interface as recited in claim **10**, 5 wherein said graphical user interface further comprises:

an audio track source selector that determines a media source from which audio tracks are available to be used in filling of the playlist.

**13**. A graphical user interface as recited in claim **12**, <sup>10</sup> wherein said graphical user interface further comprises:

an audio track replacement selector that determines whether pre-existing audio tracks within the playlist are to be removed before filling of the playlist.

15 14. A graphical user interface as recited in claim 10, wherein said graphical user interface further comprises:

an audio track replacement selector that determines whether one or more pre-existing audio tracks within the playlist are to be removed before filling of the playlist. 20

15. A graphical user interface as recited in claim 14, wherein the one or more pre-existing audio tracks being removed are those that have been played by the media device. 16. A graphical user interface as recited in claim 10.

wherein said fill criteria control comprises:

a random selection selector that determines whether audio tracks used to fill the playlist are to be randomly chosen.

17. A graphical user interface as recited in claim 10, wherein said fill criteria control comprises:

a rating selection selector that determines whether audio <sup>30</sup> tracks used to fill the playlist are to be chosen based on ratings.

18. A graphical user interface as recited in claim 10, wherein said graphical user interface further comprises:

an available capacity indication that indicates an available <sup>35</sup> capacity of the playlist.

19. A graphical user interface as recited in claim 10, wherein the media device has a storage capacity, and wherein said graphical user interface comprises:

<sup>40</sup> a user selection control that enables a user of the host computer to reserve a portion of the storage capacity of the media device for storage of non-media item data.

20. A graphical user interface as recited in claim 19,  $^{45}$  wherein a remaining portion of the storage capacity of the  $^{45}$  media device is for storage of media item data.

21. A graphical user interface as recited in claim 19, wherein said user selection control comprises:

a slider that enables the user of the host computer to control whether or not to reserve a portion of the storage capacity for storage of non-media item data.

22. A graphical user interface as recited in claim 19, wherein the non-media item data is associated with a disk mode usage of the media device.

**23**. A graphical user interface for providing media items for <sup>55</sup> a playlist for use by a host computer and a media device, the host computer including at least a processor and a display device, and the media device having a storage capacity, said graphical user interface comprising:

- a list of media items that are within the playlist, said list being displayed on the display device of the host computer;
- a fill criteria control that is user-selectable and used to specify at least one user-selected fill criteria;
- a selectable user interface control displayed on the display device of the host computer, said selectable user interface control, upon selection, initiates an automated filling of the playlist with selected one of the media items being chosen in accordance with the at least one userselected fill criteria; and
- a user selection control that enables a user of the host computer to reserve a portion of the storage capacity of the media device for storage of non-media item data, and
- wherein the automated filling of the playlist is to a nonreserved portion of the storage capacity limit.

24. A graphical user interface as recited in claim 23, wherein a remaining portion of the storage capacity of the media device is for storage of media item data.

25. A graphical user interface as recited in claim 23, wherein said user selection control comprises:

- a slider that enables the user of the host computer to control whether or not to reserve a portion of the storage capacity for storage of non-media item data.
- 26. A graphical user interface as recited in claim 23,25 wherein the non-media item data is associated with a disk mode usage of the media device.

27. A graphical user interface as recited in claim 23, wherein the playlist has a capacity limit, and

wherein the capacity limit is set to a user-specified amount that is less than the storage capacity of the media device.
28. A non-transitory computer readable medium including at least computer program code for providing media items for a media item grouping for use on a host computer and a media device, said computer readable medium comprising:

- computer program code for displaying a listing of media items that are within the media item grouping on a display screen of the host computer, all of the media items being stored locally on the host computer and at least a portion of the media items being stored on the media device;
- computer program code for determining a capacity limit for the media item grouping and a storage capacity for the media device;
- computer program code for setting a capacity limit for the media item grouping, the capacity limit being set to an amount that is less than the storage capacity of the media device;
- computer program code for comparing the current capacity for the playlist to the capacity limit for the playlist to determine available capacity for the playlist;
- computer program code for receiving a user selection to initiate automatic filling of the media item grouping with additional media items; and
- computer program code for automatically filling the media item grouping with additional media items to the capacity limit in response to the user selection to automatically fill the media item grouping if the current capacity is less than the capacity limit.

\* \* \* \* \*

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

 PATENT NO.
 : 7,958,441 B2

 APPLICATION NO.
 : 11/097591

 DATED
 : June 7, 2011

 INVENTOR(S)
 : Heller et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title page, in Item (57), in column 2, in "Abstract", line 6, delete "know" and insert -- known --, therefor.

On page 3, in column 2, under "Other Publications", line 35, delete "Columist"," and insert -- Columnist", --, therefor.

On page 3, in column 2, under "Other Publications", line 43, delete "PalmTM<sup>™</sup>" and insert -- Palm<sup>™</sup> --, therefor.

On page 4, in column 1, under "Other Publications", line 14, delete "414-417Apr." and insert -- 414-417, Apr. --, therefor.

On page 4, in column 1, under "Other Publications", line 7, delete "TapBase"," and insert -- TapeBase", --, therefor.

On page 4, in column 2, under "Other Publications", line 20, delete "Halfe-life," and insert -- Half-life, --, therefor.

On sheet 8 of 11, in Figure 8A, Box 814, line 1, delete "PREFRENCE(S)" and insert -- PREFERENCE(S) --, therefor.

In column 3, line 47, delete "if" and insert -- is --, therefor.

In column 9, line 6, delete "if" and insert -- is --, therefor.

Signed and Sealed this Twenty-ninth Day of November, 2011

David J. Kappos Director of the United States Patent and Trademark Office

Page 1 of 1

Page 00024

# EXHIBIT 5



US008046369B2

## (12) United States Patent

## Martin et al.

#### (54) MEDIA ASSET RATING SYSTEM

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- (73) Assignee: Apple Inc., Cupertino, CA (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 256 days.
- (21) Appl. No.: 11/849,995
- (22) Filed: Sep. 4, 2007

## (65) **Prior Publication Data**

US 2009/0063543 A1 Mar. 5, 2009

- (51) Int. Cl. *G06F 700/2006* (2006.01)

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## (45) **Date of Patent:** Oct. 25, 2011

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Primary Examiner — Charles Rones Assistant Examiner — Dinku Gebresenbet

#### (57) ABSTRACT

EP

Improved techniques for assigning ratings to media assets are disclosed. A rating for a media asset collection can, for example, be determined by examining the ratings of all userrated media assets in that media asset collection. Additionally or alternately, a rating for media assets in a group of media assets can, for example, be determined by examining the rating of the group of media assets.

#### 13 Claims, 4 Drawing Sheets



Apple Exhibit 4452 Apple v. SightSound Technologies CBM2013-00023 Page 00001

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## 1 MEDIA ASSET RATING SYSTEM

## BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to media asset groups and, more particularly, to rating media asset groups or media assets therein.

2. Description of the Related Art

Currently, many media management applications, such as 10 the iTunes<sup>TM</sup> application, produced by Apple Inc. of Cupertino, Calif., offer ways to rate media assets. For example, iTunes<sup>TM</sup> allows media assets to be rated on a scale of 1 to 5, with 5 being the highest rating.

Media assets can include any and all kinds of digital media 15 formats, such as audio files (e.g., MP3, AAC, Ogg Vorbis, etc.) or video files (e.g., QuickTime®, AVI). Media assets collections can include any collection of media assets, such as music albums, and music compilations. Another example of a media asset collection is known as a playlist, which can 20 pertain to a group of audio tracks.

However, current methods of rating media assets depend on intensive user input. Typically, a user must rate each individual media asset in his or her collection separately, which can be time-consuming, especially for large groups of media 25 assets. Thus, there is a need for improved approaches to rate media assets.

#### SUMMARY OF THE INVENTION

The invention pertains to improved techniques for rating media assets or media asset groups (i.e., collection of media assets). In one embodiment, ratings of media assets within a media asset group can be used to automatically determine a rating applied to the media asset group. For example, one or 35 more ratings assigned to one or more songs on an album can be used to determine a rating for the entire album. In another embodiment, a rating of a media asset group can be used to automatically determine a rating for one or more of the media assets in the media asset group. 40

The invention can be implemented in numerous ways, including as a method, system, device, or apparatus (including computer readable medium or graphical user interface). Several embodiments of the invention are discussed below.

As a computer-implemented method for assigning ratings 45 to media assets, one embodiment of the invention includes at least the act of determining a rating for an unrated media asset collection based on the user-ratings of one or more user-rated media assets in the media asset collection.

As a media management system, one embodiment of the 50 invention includes at least a rating module. The rating module can, for example, be configured to (i) determine a rating for a user-unrated media asset collection based on prior user ratings of one or more of the media assets in the media asset collection; and (ii) determine a rating for one or more user-55 unrated media assets in a user-rated media asset collection based on the user-rating of the user-rated media asset collection.

As a computer-implemented method for assigning ratings to media assets, one embodiment of the invention includes at 60 least: receiving a user collection rating for a collection including a plurality of tracks; and assigning the user collection rating to those of the tracks within the collection that have not been previously user-rated.

As a computer readable medium including at least execut-65 able computer program code tangibly stored thereon for assigning ratings to media assets, one embodiment of the

invention includes at least: computer program code for receiving a user collection rating for a collection including a plurality of tracks; computer program code for assigning the user collection rating to those of the tracks within the collection that have not been previously user-rated; computer program code for receiving a user track rating associated with a particular one of the tracks; computer program code for assigning the user track rating to the particular one of the tracks; computer program code for determining whether the collection has been previously user-rated; computer program code for determining a computed track rating based on the tracks of the collection that have been previously rated by the user; and computer program code for assigning the computed track rating to the collection as a calculated collection rating if the collection is determined not to have been previously user-rated.

Other aspects and advantages of the invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

FIG. 1 is a block diagram of a media purchase system according to one embodiment of the invention.

FIG. 2 is flow diagram of a media asset rating calculation process according to one embodiment of the invention

FIG. 3 is an example of a series of media asset rating calculations according to one embodiment of the invention.

FIG. 4 shows an exemplary computer system suitable for use with the invention.

#### DETAILED DESCRIPTION OF THE INVENTION

The invention pertains to improved techniques for rating media assets or media asset groups (i.e., collection of media assets). In one embodiment, ratings of media assets within a media asset group can be used to automatically determine a rating applied to the media asset group. For example, one or more ratings assigned to one or more songs on an album can be used to determine a rating for the entire album. In another embodiment, a rating of a media asset group can be used to automatically determine a rating for one or more of the media assets in the media asset group.

Embodiments of the invention are discussed below with reference to FIGS. 1-4. However, those skilled in the art will readily appreciate that the detailed description given herein with respect to these figures is for explanatory purposes as the invention extends beyond these limited embodiments.

FIG. 1 is a block diagram of a media purchase system 100 according to one embodiment of the invention. The media purchase system 100 includes a media store server 102 that hosts an on-line media store. The media store server 102 can off-load commerce transactions and/or delivery of purchased digital media assets to other servers, if desired. As shown in FIG. 1, the media purchase system 100 includes one or more client devices 104 for use by end users. The client devices 104 couple to a data network 106. Additionally, the media store server 102 also couples to the data network 106 can refer to one or more data networks, typically, high data-bandwidth networks, namely, wired networks, such as the Internet, Ethernet, gigabit Ethernet, and fiber optic, as well as wireless

networks such as IEEE 802.11(a), (b) or (g) (WiFi), IEEE 802.16 (WiMax), and Ultra-Wide Band (UWB).

A computer program 108, typically a media management application (MMA) or other media player application runs on the client device 104. One example of a media management 5 application is the iTunes<sup>™</sup> application, produced by Apple Inc. of Cupertino, Calif. The client devices 104 are, in general, computing devices. As an example, the client devices 104 can be specific or general-purpose personal computers or portable media players. One example of a portable media 10 player suitable for use with the invention is the iPod<sup>™</sup>, also produced by Apple Inc. The computer program 108 can be used by a consumer for a variety of purposes, including, but not limited to, browsing and/or purchasing media assets from the on-line media store provided by the media store server 15 102, creating and sharing media asset groups (e.g., playlists), organizing media assets, presenting/playing media assets, and transferring media assets between client devices 104.

The media purchase system 100 also includes a digital asset manager 114. The digital asset manager 114 is coupled 20 to a media assets database 116. The media assets database 116 stores media asset information including metadata relating to digital media assets available for purchase at the on-line media store. The metadata can pertain to individual media assets (digital media assets) or media asset groups (digital 25 media asset groups). Media assets can include, but are not limited to, music, video, text, and/or graphics files. In the case of music, a media asset group can be a playlist for the music.

The media store server 102 enables the user of a particular client device 104 to purchase media assets (e.g., songs, vidoes, albums). Subsequently, the client device 104 can download the purchased media assets from the media store server 102, or some other server, via the data network 106. As will be understood by those familiar with data networks, other network configurations are possible. Furthermore, while the shown as individual and separate devices, it will be understood by those familiar with the art that other configurations are possible. As one example, each device can be implemented such that it is distributed over multiple server comuputers. As another example, these various servers and/or managers can be implemented by a single physical server computer.

FIG. 2 is a flow diagram of a media asset rating calculation process 200 according to one embodiment of the invention. 45 The media asset rating calculation process 200 can, for example, be used with a media management application, such as the computer program 108 (MMA) illustrated in FIG. 1. The media asset rating calculation process 200 refers specifically to albums (e.g., music albums) and album tracks (e.g., 50 songs on an album). However, the invention is not limited to such media types. For example, the rating calculation process could apply to playlists or other collections of media assets in place of album tracks (audio tracks). 55

The media asset rating calculation process **200** can be used to calculate ratings for unrated media assets if a user has entered a rating for any media asset collection to which the media assets belong. For example, if a user rates a music album, all unrated album tracks on that album can receive the same rating that the album received. Alternately, if a media asset collection is unrated, but individual media assets that belong to that media asset collection receive user ratings, then a media asset collection rating can be calculated for that media asset collection based on the average ratings of indi-5 vidual media assets in the media asset collection. For example, if a user rates album tracks on an album, the album

will receive a rating based on the average of the ratings of all the user-rated album tracks. Thus, in this embodiment, the ratings of media assets without user-ratings are not considered in the calculation.

In one embodiment of the invention, user-ratings are given priority over ratings calculated using the media asset calculation process 200. According to this embodiment, user-ratings can be used to calculate ratings for unrated media assets, but calculated ratings are used to overwrite prior user-ratings. For example, if a music album has a user-rating (i.e., has been rated by a user), rating individual album tracks in the album will not affect the user album rating. Conversely, if any album tracks on an album have user-ratings, then rating the album will not affect any of the user album track ratings.

The media asset rating calculation process 200 begins with a decision 201 which detects when an album has received a user-rating. When decision 201 detects that an album has received a user-rating, that user-rating is assigned 211 to that album and the media asset rating calculation process 200 continues to decision 213. The decision 213 determines if any of the album tracks on the album lack user-ratings. Any album tracks without user ratings can then be assigned 215 the same user-rating that was assigned 211 to the album. If decision 213 determines that none of the album tracks are unrated, then the media asset rating calculation process 200 returns to decision 201 and subsequent blocks.

On the other hand, if decision 201 does not detect that an album has received a user-rating, then a decision 203 can check if an album track has received a user-rating. If so, then the user-rating can be assigned 205 to the album track and the media asset rating calculation process 200 continues to decision 207. Alternately, if the decision 203 determines that no album track has received a user rating, then media asset rating calculation process 200 returns to decision 201 and subsequent blocks.

Once the user album track rating has been assigned **205**, the media asset rating calculation process **200** continues to decision **207**, which determines if the album has previously been assigned a user-rating. If not, then the album can be assigned **209** a user album rating, which is calculated using any existing user track ratings. In one embodiment of the invention, the user album rating is calculated by taking the mean (i.e., average) of the ratings of all user-rated album tracks in the album. If, on the other hand, decision **207** determines that the album has previously been assigned a user album rating, then the media asset rating calculation process **200** continues to decision **201** and subsequent blocks.

In one embodiment of the invention, media assets are rated on a scale of 1 to 5, with 5 being the highest rating. In this rating system, a rating of zero indicates no rating. One example of a media asset rating system is found in the iTunes<sup>TM</sup> application, produced by Apple Inc. of Cupertino, Calif.

FIG. 3 depicts an example of a series of media asset ratings
calculated using a media asset rating calculation process, for example, the series of media asset ratings may be calculated using a media asset rating calculation process 200 described in FIG. 2. As discussed above in FIG. 2, in one embodiment, user-ratings can take priority over calculated ratings. Thus, in
FIG. 3, user-ratings are not overwritten by calculated ratings. For example, if a user album rating has been assigned to a particular album, rating album tracks in that album will not affect the user album rating.

FIG. 3 shows a series of time snapshots for a hypothetical media asset collection called ALBUM. Each user rating state shows a snapshot of all user-ratings and calculated ratings for ALBUM and for the album tracks on ALBUM at time  $T_{ex}$ .

where n is an integer index, initially set to 0. ALBUM is shown having three album tracks, Track\_1, Track\_2, and Track\_3, and starts out at time  $T_0$  without any user-ratings or calculated ratings.

Interspaced with the album rating states are time snapshots 5 of hypothetical user interactions with a user-rating system, in this case a system where a user rates media assets on a scale of one to four stars. Ratings are shown as a series of stars located next to either ALBUM or one of its tracks. Further, in example **200**, solid black stars indicate user-ratings while 10 white stars indicate calculated ratings.

As noted above, at time  $T_0$ , ALBUM has not yet been rated, thus no ratings are shown. At  $T_1$  a user enters a rating of two stars for Track\_2. Next, at time  $T_2$ , ALBUM receives a calculated rating of two stars, shown as white stars to indicate 15 that the rating is calculated rather than entered by a user. In this case, the album rating is based solely on the two star user track rating of two stars given to Track\_2. The ratings of Track\_1 and Track\_3 do not count when calculating the albums calculated rating since neither has received a user- 20 rating yet.

At time  $T_3$  a user enters a rating of four stars for Track\_3. At time  $T_4$  ALBUM receives a new calculated rating of three stars, based on the average of the ratings for Track\_2 and Track\_3.

At time  $T_5$  a user enters a rating of one star for ALBUM. At this point the rating for ALBUM becomes a user-rating rather than a calculated rating and is will no longer be calculated when user album track ratings are changed. However, at time  $T_6$ , album track Track\_1 receives a calculated rating of one 30 star, equal to the user-rating given to ALBUM.

At time  $T_7$ , the rating for Track\_2 is changed from two to three stars. However, as shown at time  $T_8$ , the re-rating of Track\_2 does not affect the user album rating given to ALBUM, since ALBUM's album user-rating overrides the 35 calculated rating of three stars that would display if ALBUM had not had an user album rating.

At time  $T_9$ , ALBUM receives a new rating of three stars. At time  $T_{10}$ , the rating of Track\_1, which has not yet received a user track rating, is recalculated and adjusted to three stars to 40 match the user album rating.

At time  $T_{11}$ , the user rates track Track\_1, giving it two stars. At  $T_{11}$  the album and all album tracks have received user ratings. As discussed above, in Example 2, user-ratings take priority over calculated ratings. Thus, beginning at time  $T_{11}$ , 45 no new ratings will be calculated, although a user may re-rate the album or album tracks manually if desired.

FIG. 4 shows an exemplary computer system 400 suitable for use with the invention. The methods, processes and/or graphical user interfaces discussed above can be provided by 50 a computer system. The computer system 400 includes a display monitor 402 having a single or multi-screen display 404 (or multiple displays), a cabinet 406, a keyboard 408, and a mouse 410. The cabinet 406 houses a processing unit (or processor), system memory and a hard drive (not shown). The 55 cabinet 406 also houses a drive 412, such as a DVD, CD-ROM or floppy drive. The drive 412 can also be a removable hard drive, a Flash or EEPROM device, etc. Regardless, the drive 412 may be utilized to store and retrieve software programs incorporating computer code that implements some or 60 all aspects of the invention, data for use with the invention. and the like. Although CD-ROM 414 is shown as an exemplary computer readable storage medium, other computer readable storage media including floppy disk, tape, Flash or EEPROM memory, memory card, system memory, and hard 65 drive may be utilized. In one implementation, a software program for the computer system 400 is provided in the

system memory, the hard drive, the drive **412**, the CD-ROM **414** or other computer readable storage medium and serves to incorporate the computer code that implements some or all aspects of the invention.

The various aspects, features, embodiments or implementations of the invention described above can be used alone or in various combinations.

The invention is preferably implemented by software, hardware, or a combination of hardware and software. The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the computer readable medium generally include read-only memory and random-access memory. More specific examples of computer readable medium include Flash memory, EEPROM memory, memory card, CD-ROM, DVD, hard drive, magnetic tape, optical data storage device, and carrier wave. The computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

The invention is preferably implemented by software, hardware, or a combination of hardware and software. The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the computer readable medium generally include read-only memory and random-access memory. More specific examples of computer readable medium are tangible and include Flash memory, EEPROM memory, memory card, CD-ROM, DVD, hard drive, magnetic tape, and optical data storage device. The computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

The many features and advantages of the present invention are apparent from the written description. Further, since numerous modifications and changes will readily occur to those skilled in the art, the invention should not be limited to the exact construction and operation as illustrated and described. Hence, all suitable modifications and equivalents may be resorted to as falling within the scope of the invention.

What is claimed is:

1. A computer-implemented method for assigning ratings to media assets, said method comprising:

- obtaining at least one user-rating of one or more user-rated media assets in the media asset collection;
- calculating a first rating for an unrated media asset collection based on the at least one user-rating of two or more user-rated media assets in the media asset collection, wherein the rating for the unrated media asset collection is calculated by taking an average user-rating of the two or more user-rated media assets in the unrated media asset collection;
- assigning the first rating to the unrated media asset collection:
- determining whether there is one or more unrated media assets in the media asset collection;
- assigning a second rating to the one or more unrated media assets in the media asset collection, wherein the second rating that is assigned to each of the one or more unrated media assets in the media asset collection is equal to the first rating of the unrated media asset collection;

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determining whether the at least one user-rating of the one or more user-rated media assets in the media asset collection has changed;

recalculating the first rating for the previously unrated media asset collection based on the at least one userrating of the one or more user-rated media assets in the media asset collection that has changed; and

- assigning the recalculated rating to the unrated media asset collection.
- 2. A media management system, comprising:
- a media store server including a rating module that is configured to:
  - determine a calculated rating for a user-unrated media asset collection based on prior user ratings of two or more of the media assets in the media asset collection, 15 wherein the calculated rating for the user-unrated media asset collection is calculated by taking an average user-rating of the two or more user-rated media assets in the user-unrated media asset collection;
  - determine whether there is one or more user-unrated 20 1, further comprising: media assets in the media asset collection; receiving a user rat
  - determine a calculated rating for the one or more userunrated media assets in the media asset collection based on the calculated rating of the user-unrated media asset collection, wherein the calculated rating 25 for the one or more user-unrated media assets is equal to the calculated rating of the user-unrated media asset collection;
  - determine whether at least one of the prior user-ratings of the one or more user-rated media assets in the 30 media asset collection has changed; and
  - recalculate the rating for the previously user-unrated media asset collection based on at least the at least one of the prior user-ratings of the one or more user-rated media assets in the media asset collection that has 35 changed.
- 3. The media management system as recited in claim 2, wherein said rating module is further configured to:
  - assign the determined calculated rating or the recalculated rating to the one or more user-unrated media assets in the 40 media asset collection to the one or more user-unrated media assets in the media asset collection; and
  - assign the determined calculated rating or the recalculated rating to the user-unrated media asset collection to the media asset collection.

4. A computer readable storage medium including at least executable computer program code stored thereon for assigning ratings to media assets, said computer readable medium comprising:

- computer program code for receiving a user collection 50 rating for a collection including a plurality of tracks;
- computer program code for assigning the user collection rating to those of the tracks within the collection that have not been previously user-rated;
- computer program code for receiving a user track rating 55 associated with a particular one of the tracks;
- computer program code for determining whether the particular one of the tracks has been previously user-rated or assigned the user collection rating;
- computer program code for assigning the user track rating 60 to the particular one of the tracks when determined to have been previously assigned the user collection rating; computer program code for determining whether the col-
- lection has been previously user-rated; computer program code for determining a computed track 65 rating based on the tracks of the collection that have been previously rated by the user;

- computer program code for assigning the computed track rating to the collection as a calculated collection rating if the collection is determined not to have been previously user-rated;
- computer program code for determining whether the at least one user-rating of one or more of the tracks in the collection has changed;
- computer program code for re-determining the computed track rating based on the tracks of the collection that have been previously rated by the user when determined that the at least one user-rating of one or more of the tracks in the collection has changed; and
- computer program code for assigning the re-determined computed track rating to the collection.

5. The computer-implemented method as recited in claim 4, wherein the computed track rating is an average track rating.

6. The computer-implemented method as recited in claim 1, further comprising:

- receiving a user rating for the unrated media asset collection that was rated using the calculated first rating; and assigning the received user rating to the unrated media asset collection
- 7. The computer-implemented method as recited in claim 6, further comprising:
  - determining whether there is one or more unrated media assets in the media asset collection;
  - recalculating a rating for the one or more unrated media assets based on the received user rating; and
  - assigning the recalculated rating to the one or more unrated media assets in the media asset collection,
  - wherein the recalculated rating that is assigned to each of the one or more unrated media assets in the media asset collection is equal to the received user rating.

8. The computer-implemented method as recited in claim 7, wherein the recalculated rating that is assigned to each of the one or more unrated media assets in the media asset collection is equal to the received user rating.

9. The media management system as recited in claim 3, wherein the media store server is further configured to:

- receive a user rating for the user-unrated media asset collection that was rated using the calculated rating or the recalculated rating; and
- assign the received user rating to the user-unrated media asset collection that was rated using the calculated rating or the recalculated rating.

10. The media management system as recited in claim 9, wherein the media store server is further configured to:

- determine whether there is one or more user-unrated media assets in the media asset collection;
- calculate an asset rating for the one or more user-unrated media assets based on the received user rating; and
- assign the asset rating to the one or more user-unrated media assets in the media asset collection.

11. The computer-implemented method as recited in claim 1, wherein the media asset collection is an album and the media assets are songs.

12. The media management system as recited in claim 2, wherein the media asset collection is an album and the media assets are songs.

13. The computer readable storage medium as recited in claim 4, wherein the collection is an album and the tracks are songs.

# EXHIBIT 6

**EXHIBIT** 

## Reprinted from THE WALL STREET JOURNAL FRIDAY, MAY 7, 1999

THE FRONT LINES BY THOMAS PETZINGER JR.

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## **Two Entrepreneurs** Try to Turn Net Patent Into a Blockbuster

PITTSBURGH COTT SANDER and Arthur Hair don't come off as entertainment moguls. Their office is next to a suburban high school. Between them they have nearly as many children-eight-as they have employees. They onze sincerity. They live in Pittsburgh, for Pete's sake.

But during a lunch in a neighborhood pizza place, Mr. Sander keeps a cell



#### Scott Sander and Arthur Hair

phone pasted to his ear. Hollywood is on the line. After giving him the cold should-er for years, the entertainment companies are now calling. He and Mr. Hair, both 38 years old.

have as much claim as anyone to the next Internet entertainment gusher. How they staked it shows the value of vision and stated it shows the value of vision and persistence—and how to profit from the billion-dollar errors of others. Growing up here, they rock-climbed as a team, inspiring a lifetime of trust.

Though separating after their 1978 graduation-Mr. Sander to the University of Denver and then to Silicon Valley to work in commercial real estate, Mr. Hair to Purdue and then to Texas Instruments in Dallas-they never fell out of touch.

Then, at a party in the mid-1980s, Mr. Hair saw a gleaming new object called a compact disk. "This is stupid!" he said. Digital music-movies, too-should be sold through phone lines and computer networks, not on hunks of plastic!

Intent on commercializing the concept, he moved back to Pittsburgh, where his he noved back to Pittsburgh, where his father, a Westinghouse engineer and an inventor himself, provided some stern advice: "Get a patent." Indeed, though it seems an obvious business model today, the idea of downloading and paying for entertainment by phone line was new technology in the mid-S0s. For five years technology in the mid-'80s. For five years, while working in property management, Mr. Hair awaited his patent. Finally, in 1993, it came, quaintly titled Method for Transmitting a Desired Digital Video or Audio Signal

LOT OF inventors simply hire a lawyer, sue interlopers and wait for the royalty checks to roll in. Others try to commercialize their inventions themselves, only to discover that business demands different skills than innovating does. In contrast, Mr. Hair recruited his rock-climbing buddy, with his years of California real-es-tate experience. They launched a company, now called Sightsound.com, on the patent.

They focused first on music, working with unsigned artists to build a market from the bottom up. In 1995 a local band, the Gathering Field, became the first (to their knowledge) to sell songs as file downloads. But just as the grass-roots strategy was showing promise, a promi-nent venture capitalist pronounced the business plan "all wrong." Only by part-nering with the major record labels, they were told, would Sightsound create a major latement major. major Internet market.

The labels were incredulous, "It was The labels were incredulous. "It was like saying you have a patent on oxygen," recalls Eric Kronfeld, then at Polygram. But he could see the entrepreneurs were not to be taken lightly: "They were very grounded, serious, calm, hard-working young men." Polygram paid them \$55,000 (the amount they owed their lawyer) to Sheak to no one other while the labels. speak to no one else while the label's parent did some research. Eventually word came back: The patent might be defensible, but the stakes were so huge, no one would say for sure. Polygram declined to get involved.

It was downhill from there. Record executives were terrified that people would make unauthorized digital copies.

(Duh, as if they don't do that anyway,) Even legitimate downloads would devalue all those disk-minting factories. "We grossly underestimated the labels' fear of the Internet," says Mr. Sander. "They thought it was the bubonic plague." This resistance to selling music directly to computers was ultimately catastrophic for the labels themselves, as fans now illegally download from one another what the industry refuses to sell.

But now, the music industry's disaster gives Sightsound credibility in dealing with the film studios. Just last month, Microsoft introduced free software that makes video playback possible at 30 frames a second, equivalent to a video played on a TV set. The next day Sightsound purchased the back cover of Variety magazine, warning studio chiefs that they had better begin selling their product over the Net before people began stealing it—adding the claim that only Sightsound, because of its patent, could lawfully handle the transactions.

> HOUGH SELDOM silent on its own copyright issues, the Motion Pic-ture Association of America refuses to comment on the patents. But several independent studios, taking

no chances, are already casting their lot with Sightsound. Last month, "Pi," an ac-claimed low-budget thriller about chaos theory on Wall Street, became the first film sold by download. (The distributor, Artisan Entertainment, also acquired a stake in Sightsound.) In a few weeks, Sightsound will release additional films in conjunction with the Cannes festival.

If it's to become the Blockbuster of the Internet. Sightsound will probably have to prove its patent in court. It's also up against transmission methods besides downloading, such as the "streaming" technology of RealNetworks, over which Sightsound appears to have no claim. But when I visited last week, Sight-

sound looked like a company positioned to win. It has raised \$3 million. It's hiring like mad. Computers in Pittsburgh and six other cities are ready to sell 375,000 feature films a day to Web users. Best of all for the studios, an elaborate

accounting system will send the bulk of all revenue back to Hollywood. Says Mr. Sander, "We're a company that believes in intellectual property, because we own some

# EXHIBIT 7



US007797242B2

## (12) United States Patent

## Gautier et al.

## (54) METHOD AND SYSTEM FOR NETWORK-BASED PURCHASE AND DISTRIBUTION OF MEDIA

- (75) Inventors: Patrice Gautier, San Francisco, CA (US); Max Muller, San Jose, CA (US); Thomas Burkholder, North Vancouver (CA); Jeffrey L. Robbin, Los Altos, CA (US); Dave Heller, San Jose, CA (US); Thomas Dowdy, Sunnyvale, CA (US); Mike Wiese, Cupertino, CA (US)
- (73) Assignee: Apple Inc., Cupertino, CA (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1335 days.
- (21) Appl. No.: 10/833,267
- (22) Filed: Apr. 26, 2004

#### (65) Prior Publication Data

US 2005/0021478 A1 Jan. 27, 2005

#### **Related U.S. Application Data**

- (63) Continuation-in-part of application No. 10/776,403, filed on Feb. 10, 2004, now abandoned.
- (60) Provisional application No. 60/465,410, filed on Apr. 25, 2003, provisional application No. 60/534,555, filed on Jan. 5, 2004.
- (51) Int. Cl. *G06Q 99/00* (2006.01)

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Primary Examiner—Andrew J. Fischer Assistant Examiner—Jacob C. Coppola

#### (57) ABSTRACT

Methods and systems for network-based purchase and distribution of media are disclosed. The purchase and distribution of media by these methods and systems are not only secure but also controlled. The security restricts access to media within media files during downloads as well as while stored at a server and/or client. For example, a potential purchaser can search and browse through numerous media items on-line that are available for purchase. The potential purchaser can thereafter purchase one or more media items on-line with great ease. Upon purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item is then encrypted for the purchaser's use and stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item). Improved graphical user interfaces suitable for reviewing, browsing, previewing and/or purchasing numerous media items are also disclosed.

#### 45 Claims, 26 Drawing Sheets





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## FIG. 2B



FIG. 3



FIG. 4



FIG. 5A

550



FIG. 5B



FIG. 6





## FIG. 7A



FIG. 7B



**FIG. 8**


FIG. 9





FIG. 10



1120 0 1102-3 1104 Vecount Steredo Musice Story Select Artist Repress ď Len's 1102-2 Album Jani Marms Keith Harling Keri Leigh And The Blue Devils Reba McEntire 1124 South States and States FIG. 11B Anita Cochran ITunes Biliy Bragg Bryan White Holiy Dunn Time | Artis 1.1 ) 441 1102-1 1108 **122** Children's Music Books & Spaken ¢ A | Song Name Hip Mop/Rap nspirational Alternative Classical Electronic فستلالك Holidav Glues Dance Folk 🕼 Sponge Bob 🔊 Thomas' Music (C "don't steal music Max's Boomstick Motion Skkness Purchased Music 0 1106 All Store Music 월 All Store Musi 월 Good songs 월 Rock 년 SOMAlm 23 Alusic Store Radio () () () () Ţ









**FIG. 12B** 

US 7,797,242 B2





FIG. 13A

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FIG. 13B

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# FIG. 14A



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FIG. 14B



FIG. 15A









FIG. 16

#### METHOD AND SYSTEM FOR NETWORK-BASED PURCHASE AND DISTRIBUTION OF MEDIA

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a Continuation-In-Part of U.S. patent application Ser. No. 10/776,403, filed Feb. 10, 2004 now abandoned, and entitled "METHOD AND SYSTEM FOR 10 NETWORK-BASED DISTRIBUTION OF MEDIA", which is hereby incorporated by reference herein, and which claims the benefit of: (i) U.S. Provisional Patent Application No. 60/465,410, filed Apr. 25, 2003, and entitled "METHOD AND SYSTEM FOR SECURE NETWORK-BASED DIS- 15 TRIBUTION OF MEDIA", which is hereby incorporated by reference herein; and (ii) U.S. Provisional Patent Application No. 60/534,555, filed Jan. 5, 2004, and entitled "GRAPHI-CAL USER INTERFACE FOR BROWSING, SEARCHING AND PRESENTING MEDIA ITEMS", which is hereby 20 incorporated by reference herein.

In addition, this application claims priority benefit of: (i) U.S. Provisional Patent Application No. 60/465,410, filed Apr. 25, 2003, and entitled "METHOD AND SYSTEM FOR SECURE NETWORK-BASED DISTRIBUTION OF 25 MEDIA", which is hereby incorporated by reference herein; and (ii) U.S. Provisional Patent Application No. 60/534,555, filed Jan. 5, 2004, and entitled "GRAPHICAL USER INTER-FACE FOR BROWSING, SEARCHING AND PRESENT-ING MEDIA ITEMS", which is hereby incorporated by ref- 30 erence herein.

This application is also related to: (i) U.S. patent application Ser. No. 10/832,984, filed concurrently, and entitled "GRAPHICAL USER INTERFACE FOR BROWSING, SEARCHING AND PRESENTING MEDIA ITEMS", 35 which is hereby incorporated by reference herein; and (ii) U.S. patent application Ser. No. 10/832,812, filed concurrently, and entitled "METHOD AND SYSTEM FOR SECURE NETWORK-BASED DISTRIBUTION OF CON-40 TENT", which is hereby incorporated by reference herein.

#### BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to media purchase and distribution and, more particularly, to media purchase and distribution in a client-server environment.

2. Description of the Related Art

Traditionally, music has been purchased at music stores or 50 music departments of larger stores. A consumer will visit the music store or department and manually browse for albums or compact discs (CDs) of interest. Often, the music in the music store or department is categorized by genre, and then indexed by artist. For example, genre can include rock, country, pop, 55 network, one embodiment of the invention includes at least soul, jazz, etc. After the consumer selects an album or CD of interest, the consumer proceeds to a check-out register to pay for the album or CD being purchased.

In recent years music delivery or distribution over the Internet has become popular. Due to the advances in efficient file 60 formats, such as MP3 and MPEG4, the size of media files have become small enough to make their download via the Internet practical. Also, technological advances have led to higher-speed Internet connections and lower cost of memory. The combination of these advances make downloading media 65 files, such as for music and videos, manageable and not too time consuming.

One popular approach to music distribution was mp3.com which uses a centralized server for storage of the numerous songs that are available for download. Another popular approach to music distribution was Napster in which peer-topeer sharing was utilized. With peer-to-peer sharing, the numerous songs reside on the user machines of the many users, not on a centralized server.

However, unrestricted use and distribution of music files can lead to copyright violations. It is, therefore, desirable for companies to be endorsed by the music industry. However, to obtain endorsement, companies must charge users for access to the songs. Some companies charge a monthly subscription fee and permit subscribers to play songs by streaming such to the subscriber's machine where the songs are played. Streaming does not store the music files on the subscriber's machine, and thus is less of a concern for the music industry. However, such a system requires a network connection and network availability in order for subscribers to play songs.

As a result, there is a need to permit songs to be purchased and then made available locally to purchasers so that the purchaser is not dependent and constrained by the availability of a network connection for playback of the songs. However, the music industry requires its songs be secured against unauthorized copying or other copyright violations. Thus, there is also the need to incorporate security measures to restrain the susceptibility to unauthorized use or distribution of the songs.

#### SUMMARY OF THE INVENTION

Broadly speaking, the invention relates to network-based purchase and distribution of media. The purchase and distribution of media are not only secure but also controlled. The security restricts access to media within media files during downloads as well as while stored at a server and/or client.

One aspect of the invention pertains to a system and method for purchasing media items over a network. A potential purchaser can search and browse through numerous media items on-line that are available for purchase. The potential purchaser can thereafter purchase one or more media items on-line with great ease. Upon purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item can be encrypted for the purchaser's use before or after download to the purchaser. The encrypted content for the media item can then be stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item).

The invention can be implemented in numerous ways, including as a method, system, device, apparatus, graphical user interface, or computer readable medium. Several embodiments of the invention are discussed below.

As a method for purchasing access to a media item over a the acts of: receiving, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user through a single graphical user interface action by the user once an identifier for the particular media item is displayed on a display screen for the user, and the buy request including an account identifier for the user; initiating payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user; determining media access information pertaining to the particular media item; and sending, over the network, the media access information to a user machine of the user, the media access information thereafter being used by the user machine to access the particular media item.

As a computer readable medium including at least computer program code for purchasing access to a media item 5 over a network, one embodiment of the invention includes at least: computer program code for receiving, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user, the buy request including an identifier for the particular media item 10 and an account identifier for the user; computer program code for initiating payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user; computer 15 program code for determining media access information pertaining to the particular media item; and computer program code for sending, over the network, the media access information to a user machine of the user, the media access information thereafter being used by the user machine to access the 20 particular media item.

As a network-based media purchase system, one embodiment of the invention includes at least: a plurality of client media player programs, each of the client media player programs being resident on a different client machine; a media 25 storage server that stores media items in an encrypted format; and a media commerce server. The media commerce server enables each of the client media player programs to purchase media items by enabling the client media player programs to initiate payment for such, to download the media items that 30 ing to one embodiment of the invention. have been purchased, to modify encryption imposed on the media items, to store the media items to the client machines, and to subsequently use the stored media items.

As a network-based media purchase system, another embodiment of the invention includes at least: a plurality of 35 according to one embodiment of the invention. client media player programs, each of the client media player programs being resident on a different client machine; a media storage server that stores media items in an encrypted format; and a media commerce server. The media commerce server enables each of the client media player programs to 40 purchase media items by enabling the client media player programs to specify at least one media item to purchase and to initiate payment for the purchase, to encrypt the at least one media item particular for a user account or user associated with the one of the client media player programs, and to 45 to one embodiment of the invention. download and store the at least one media item that has been encrypted to the client machine operating the one of the client media player programs.

As a method for processing an electronic payment for an online purchase, one embodiment of the method includes at 50 least the acts of: receiving purchase information for an online purchase made by a user; deferring processing of electronic payment for the online purchase; accumulating the purchase information for the online purchase together with one or more other online purchases of the user being deferred; determin- 55 ing whether a deferral limit for the online purchases of the user being deferred has been reached; and initiating an aggregate electronic payment transaction for the online purchases being deferred after the determining determines that the deferral limit has been reached.

As a computer readable medium including at lest computer program code for processing an electronic payment for an online purchase, one embodiment of the invention includes at least: computer program code for receiving purchase information for an online purchase made by a user; computer 65 dow according to one embodiment of the invention. program code for deferring processing of electronic payment for the online purchase; computer program code for accumu-

lating the purchase information for the online purchase together with one or more other online purchases of the user being deferred; computer program code for determining whether a deferral limit for the online purchases of the user being deferred has been reached; and computer program code for initiating an aggregate electronic payment transaction for the online purchases being deferred after the determining determines that the deferral limit has been reached.

Other aspects and advantages of the invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

FIG. 1 is a block diagram of a media purchase system according to one embodiment of the invention.

FIGS. 2A and 2B are flow diagrams of media purchase processing according to one embodiment of the invention.

FIG. 3 is flow diagram of media commerce processing according to one embodiment of the invention.

FIG. 4 is a flow diagram of transaction completion processing according to one embodiment of the invention.

FIG. 5A is a flow diagram of payment processing accord-

FIG. 5B is a screen shot of a representative application program window that displays purchase history information corresponding to a user's account.

FIG. 6 is a flow diagram of media delivery processing

FIG. 7A is a diagram of an application program window according to one embodiment of the invention.

FIG. 7B is a screen shot of a representative application program window according to one embodiment of the invention.

FIG. 8 is a flow diagram of media search processing according to one embodiment of the invention.

FIG. 9 is a flow diagram of additional processing according

FIG. 10 is a diagram of an application program window according to one embodiment of the invention.

FIGS. 11A-11C are screen shots illustrating successive views of a browse feature according to one embodiment of the invention.

FIGS. 12A and 12B are flow diagrams of media browse processing according to one embodiment of the invention.

FIGS. 13A-13B are screen shots illustrating additional features of a graphical user interface according to other embodiments of the invention.

FIGS. 14A and 14B are screen shots illustrating explicit content notification features according to one embodiment of the invention.

FIG. 15A is a diagram of an application program window according to one embodiment of the invention.

FIG. 15B is a diagram of a window according to one embodiment of the invention.

FIG. 15C is a screen shot of an application program win-

FIG. 16 is a flow diagram of media page processing according to one embodiment of the invention.

#### DETAILED DESCRIPTION OF THE INVENTION

The invention relates to network-based purchase and distribution of media. The purchase and distribution of media are not only secure but also controlled. The security restricts 5 access to media within media files during downloads as well as while stored at a server and/or client. The invention also relates to graphical user interfaces that assist users in locating media to be purchased.

One aspect of the invention pertains to a system and 10 method for purchasing media items over a network. A potential purchaser can search and browse through numerous media items on-line that are available for purchase. The potential purchaser can thereafter purchase one or more media items on-line with great ease. Upon purchasing a 15 media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item is then encrypted for the purchaser's use and stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item). 20

Another aspect of the invention pertains to a graphical user interface suitable for reviewing browsing numerous media items. The graphical user interface is also suitable for previewing or purchasing media items in an on-line manner. The graphical user interface is presented to a user at a client (client 25 machine). In one embodiment, the graphical user interface is presented to the user by an application program that runs on the client.

The invention pertains to a method and system for controlled distribution of media in a client-server environment. 30 The controlled distribution uses encryption and user accounts to not only restrict unauthorized access to the media but also to limit usage rights to the media by authorized users. The media can, for example, be audio, video, or image data.

Embodiments of various aspects of the invention are discussed below with reference to FIGS. **1-16**. However, those skilled in the art will readily appreciate that the detailed description given herein with respect to these figures is for explanatory purposes as the invention extends beyond these limited embodiments.

One aspect of the invention pertains to a system and method for purchasing media items over a network. A potential purchaser can search and browse through numerous media items that are available for purchase. A potential purchaser can purchase a media item with great ease. Upon 45 purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item is then encrypted for the purchaser's use and stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media 50 item). However, the use of the media item can still be limited. For example, only up to a predetermined number user machines can be authorized to use the media item, or only up to a predetermined number of compact disc copies can be made of a grouping or collection of media items (e.g., a 55 playlist)

FIG. 1 is a block diagram of a media purchase system 100 according to one embodiment of the invention. The media purchase system 100 includes a media commerce server 102. The media commerce server 102 coordinates review and/or 60 purchase of media items through on-line transactions. Online transactions to purchase media items is also referred to as electronic commerce (e-commerce). The media purchase system 100 also includes a client 104. Typically, the media purchase system 100 would include a plurality of different 65 clients 104. Each client 104 includes a media player 108. The media player 108 is an application program (e.g., software

application) that operates on the client 104, which is a computing device. The client 104 is coupled to the media commerce server 102 through a data network 106. Hence, any of the clients 104 can interact with the media commerce server 102 to review and/or purchase media items. In one embodiment, the data network 106 includes at least a portion of the Internet. The clients 104 can vary with application but generally are computing devices that have memory storage. Often, the clients 104 are personal computers or other computing devices that are capable of storing and presenting media to their users.

The media purchase system 100 also includes a media storage server 110 and a media store 112. The media storage server 110 represents a remote storage server that couples to 15 the data network 106. The media store 112 provides mass storage of the numerous media items that are available for purchase via the media purchase system 100. Once purchased, the media items can be accessed from the media store 112 over the data network 106 by way of the media storage 20 server 110.

More particularly, the media purchase system 100 allows a user of the client 104 to utilize the media player 108 to browse, search or sort through a plurality of media items that can be purchased from the media commerce server 102. The media player 108 may also allow the user to preview a media clip of the media items. In the event that the user of the media player 108 desires to purchase a particular media item, the user (via the media player 108) and the media commerce server 102 engage in an on-line commerce transaction in which the user pays for access rights to the particular media item. In one embodiment, a credit card associated with the user is credited for the purchase amount of the particular media item.

In the media purchase system 100 shown in FIG. 1, the media items are stored in the media store 112 and retrieved via the media storage server 110. Hence, the media commerce server 102 need not burden its resources to deliver any of the media items that may be purchased to the client 104. Instead, on purchasing a particular media item, the media commerce 40 server 102 sends download information to the media player 108 on the client 104. The download information can then be used by the media player 108 (and the client 104) to retrieve the media content for the particular media item by interacting with the media storage server 110 through the data network 106. In this regard, the media storage server 110 obtains the media content corresponding to the particular media item from the media store 112 and downloads such content through the data network 106 to the client 104. The downloaded media content can then be stored on the client 104. In one embodiment, the downloaded media content is stored on the client 104 as received. In another embodiment, the downloaded media content is transcrypted from one encryption key to another encryption key before persistent storage on the client 104. In still another embodiment, the downloaded media content is encrypted as received at the client 104 but is decrypted and then re-encrypted before persistent storage on the client 104. Thereafter, the media player 108 can present (e.g., play) the media content at the client 104.

The connections through the data network 106 between the media commerce server 102, the client 104 and the media storage server 110 can be through secure connections, such as Secure Sockets Layer (SSL). Further, the media content is stored at the client 104 in an encrypted manner.

As discussed in greater detail below, the media player 108 can utilize an improved graphical user interface. More particularly, in one embodiment, a window presented on a display device of the client 104, when executing the media player 108, includes an upper window that displays content provided by the media commerce server 102 in a browser-like manner, and a lower window displays content provided by the media commerce server 102 in a typical media player-like manner. In another embodiment, a window presented on a 5 display device of the client 104, when executing the media player 108, includes an upper window that displays a multitier browse interface that implements a browse function with respect to the media items through interaction with the media commerce server 102.

FIGS. 2A and 2B are flow diagrams of media purchase processing 200 according to one embodiment of the invention. The media purchase processing 200 is, for example, processing associated with a media player of a media purchase system. The media player can, for example, be the 15 media player 108 operating on the client 104 illustrated in FIG. 1.

The media purchase processing 200 initially permits a user to browse 202 available media items. Typically, the media purchase system supports the purchase of a large number of 20 media items. Hence, the ability to browse, sort and search the available media items is beneficial.

Next, a decision **204** determines whether a buy selection has been made. Here, in one embodiment, the buy selection is a single user interface action, such as one click of a button. 25 The buy selection is with respect to a selected media item. The buy selection means that the user desires to purchase the selected media item. When the decision **204** determines that the buy selection has not yet been received, then the processing returns to repeat the operation **202** and subsequent operaitons. Once the decision **204** determines that a buy selection has been made, a decision **206** determines whether a buy warning is enabled. When the decision **206** determines that a buy warning is enabled, then a warning dialog is displayed **208** to the user of the media player. The warning dialog serves to warn the user that the buy transaction will be performed unless now canceled.

Following the operation 208, as well as directly following the decision 206 when the buy warning is not enabled, a buy request is prepared and sent 210 to a media server (e.g., the 40 media commerce server 102) of the media purchase system. After the buy request has been prepared and sent 210, a decision 212 determines whether a response has been received. When the decision 212 determines that a response has not yet been received, a decision 214 determines whether 45 an authentication request is instead received. When the decision 214 determines that an authentication request is not received, then the media purchase processing 200 returns to repeat the decision 212 and subsequent operations. On the other hand, when the decision 214 determines that an authen- 50 tication is to be performed, then authorization information is entered 216. Here, the authorization information can be provided or entered 216 by the user associated with the media player. Subsequently, the authentication information that has been entered 216 is sent 218 to the media server. 55

Following the operation 218, a decision 220 determines whether the authentication has been successful. When the decision 220 determines that authentication has been successful, then the media purchase processing 200 returns to repeat the decision 212 and subsequent operations. On the other 60 hand, when the decision 220 determines that authentication has been unsuccessful, the media purchase processing 200 is complete and ends.

Alternatively, when the decision **212** determines that a response to the buy request has been received, media access 65 information is obtained **222**. The response to the buy request includes at least the media access information. According to

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one embodiment, the media access information informs the media player as to where to locate the appropriate media file that has been purchased as well as a download key and a security token. The download key is later used in decrypting the media file. The security token is used in verifying that the right to download the media file has been purchased. In one embodiment, the location of the appropriate media file resides on a media storage server, such as the media storage server 110. Typically, the media storage server is a centralized repository for media files. After the media access information has been obtained 222, an access request for the appropriate media file is prepared and sent 224. The access request is a request to the media storage server that stores the appropriate media file. In one example, the location of the appropriate media file can be designated by a Universal Resource Locator (URL).

Next, a decision 226 determines whether a response has been received. Here, the response, if received, pertains to the access request that was prepared and sent 224. When the decision 226 determines that a response to the access request has not yet been received, the media purchase processing 200 awaits such a response. Next, a decision 228 determines whether the user is authorized. Here, the response will either indicate that the request failed due to a lack of authorization or has succeed and provides (e.g., downloads) the requested media file. When the decision 228 determines that the received response indicates failed authorization, then an unauthorized message is displayed 230 indicating that access to the requested media file is denied. Following the operation 230, when the user is not authorized, the media purchase processing 200 is complete and ends.

On the other hand, when the decision 228 determines that the user is authorized to receive the response, the encrypted media file for the selected media item is received 232. The encrypted media file can be received as part of the response or following the response. Then, the encrypted media item can be stored 234 to the client storage, and a complete notification can be sent 236. The complete notification can be sent 236 before or after the storage 234. At this point, the user of the client can thereafter present (e.g., play) the media content within the encrypted media item from the client storage after first decrypting the same using an appropriate key. The appropriate key is, for example, a user key that is associated with a user's account with the media purchase system 100. Optionally, after the encrypted media item is received 232 and before its storage to the client storage, the encryption imposed on the media item can be altered, such as by transcryption from one encryption key (e.g., download key) to another encryption key (e.g., user key) or by decryption from one encryption key (e.g., download key) followed by re-encrypted with another encryption key (e.g., user key).

FIG. 3 is flow diagram of media commerce processing 300 according to one embodiment of the invention. The media commerce processing 300 is, for example, performed by a media commerce server, such as the media commerce server 102 illustrated in FIG. 1.

The media commerce processing 300 begins with a decision 302 that determines whether a buy request has been received. When the decision 302 determines that a buy request has not yet been received, the media commerce processing 300 awaits such a request. On the other hand, when the decision 302 determines that a buy request has been received, the media commerce processing proceeds to process the buy request. In this regard, an account identifier is identified 304 from the buy request. Here, the buy request is sent by a client to the media commerce server on behalf of a user of the client (namely, user of a media player operating on

the client). In one embodiment, the buy request that is sent to the media commerce server includes not only an account identifier for the user of the client but also at least one media item identifier, media price, and a password token. The password token is random value (e.g., 128 bit string) that is different for every user. The media storage server provides the password token to the client as a result of successful authentication of the user. When the buy request includes a valid password token, the media commerce server can deem the client as properly authenticated.

Next, a decision 306 determines whether authentication is required prior to purchase of the media items. When the decision 306 determines that authentication is required, additional processing can be performed to determine whether such authentication exists. In one embodiment, the user's 15 account or client can configure whether such authentication is required or can be overridden by the user. In one embodiment, the authentication is provided to help protect the user of the client (e.g., media player) from other unauthorized users who might access the media commerce server from the client after 20 the user has successfully been authenticated to the media commerce server. The re-authentication is thus used to confirm that the particular user of the client (e.g., media player) is indeed the authorized user for such a system. In this regard, authentication is requested 308. Then a decision 310 deter- 25 mines whether an authentication response has been received. Once the decision 310 receives the authentication response, a decision 312 determines whether the authentication response is able to successfully authenticate the user. When the decision 312 determines that authentication has not been success- 30 ful, a message indicating that an unauthorized user cannot buy media items is sent 314 to the client for display to the user.

On the other hand, when the decision 312 determines that authentication has been successful, then additional processing is performed to facilitate the purchase of the selected 35 media item identified in the buy request. In this regard, payment for the selected media item is initiated 316. Here, according to one embodiment, the payment can be made by a credit card, and the initiation of such payment can verify the credit card's existence, but may or may not seek to post the 40 charge at this time. As discussed in more detail below, it may be more efficient and desirable to defer the actual posting of the credit to the credit card until a later time. Nevertheless, after the payment for the selected media item has been initiated 316, media access information is obtained 318. The 45 media access information is information that will enable the client (e.g., media player) to retrieve and then access the media content for the selected media item. The media access information, in one embodiment, includes a URL, a download key, and a security token. Next, the media access infor- 50 mation is sent 320. Here, the media access information is sent from the media commerce server to the client, namely, the media player operating on the client. Then, the transaction associated with the purchase of the selected media item is marked 322 and remembered as being "open." At this point, 55 the transaction is not fully completed because the media content for the selected media item has not yet been received by the client. Following the operations 314 and 322, the media commerce processing 300 is complete and ends.

FIG. 4 is a flow diagram of transaction completion processing 400 according to one embodiment of the invention. The transaction completion processing 400 begins with a decision 402. The decision 402 determines whether a complete notification has been received. Here, a complete notification is a notification provided by a client to the media commerce 65 server that indicates that a previously "open" transaction is now complete. Once the decision 402 determines that a com-

plete notification has been received, the corresponding "open" transaction is identified 404. Then, the identified "open" transaction is closed 406. Once the identified "open" transaction is closed 406, the client is no longer able to download the media content for a purchased media item from a media storage server (FIG. 6). In other words, the transaction is "closed" only after the client has confirmed receipt of the entire media content for the selected media item. By this approach, the client, after having paid for a particular media item, is guaranteed to receive a full copy of the media content even in the event the download process gets interrupted or dropped several times before it is successfully completed.

Another aspect of the invention pertains to processing of online payment for one or more media items being purchased. FIG. 5A is a flow diagram of payment processing 500 according to one embodiment of the invention. The payment processing 500 is, for example, performed by a server. The server can be a media commerce server, such as the media commerce server 102 illustrated in FIG. 1. In one embodiment, the payment processing 500 is invoked by block 316 illustrated in FIG. 3 which initiates payment for a selected media item that is being purchased. However, the payment processing 500 can also be periodically invoked or invoked on

event. The payment processing **500** can also be implemented by one or a plurality of processes.

The payment processing 500 begins with a decision 502 that determines whether there is an open purchase container. Here, a purchase container is a file, folder or other data storage means that provides a temporary holding area for purchases being made with respect to media items. A purchase container can hold information for a number of different purchases for media items. When the decision 502 determines that there is no open purchase container, then a purchase container is opened 504. Then, following the block 504 directly or following the decision 502 when there is already an open purchase container, the selected media item being purchased is added 506 to the purchase container. Here, the purchase container is particular to the user or the user account. At a minimum, for the selected media item, the media purchase container would contain at least a price and a text descriptor for the selected media item. Alternatively, the purchase container could contain a link or reference to such information.

Next, a decision 508 determines whether a purchase deferral limit has been reached. According to the payment processing 500, individual purchases are deferred until the purchase deferral limit has been reached. The purchase deferral limit serves to batch up one or more individual media item purchases for consolidated or block processing. One advantage of the purchase deferral limit is that transaction costs associated with electronic payment systems are reduced. The purchase deferral limits can vary depending upon implementation. As one example, a purchase deferral limit can be based on the number of purchased media items that are in the purchase container. Another example of a purchase deferral limit is time-based, for example, the duration of time since the purchase container was first opened. As another example, the purchase deferral limit can be based upon the aggregate cost of the media items being purchased.

As a more specific example, the purchase deferral limit might use a combination of dollar amount or time limit, whichever occurs first. For example, the dollar amount could be ten US dollars (\$10.00), and the time limit could be one day. Then, once the media items within the purchase container have a purchase price that exceeds ten dollars, the payment processing **500** would continue so as to obtain electronic payment for such media items within the purchase container. Also, should the time limit of one day be reached before the dollar limit is reached, then the payment processing 500 would also continue so as to obtain electronic payment for such media items within the purchase container even though the dollar limit was not met.

In any case, when the decision 508 determines that the purchase dollar limit has been reached, then the purchase container is closed 510. Then, the payment processing 500 causes 512 a payment transaction to occur for the combined purchase. In other words, if twelve media items at one dollar 10 cost each were contained within the purchase container, then the payment transaction would cause 512 the total amount of twelve dollars (plus any tax or service charge) to be credited to the electronic payment means associated with the user account of the purchaser. An electronic payment system asso- 15 ciated with the electronic payment means would then process the payment transaction and charge the user for the media items being purchased. Given that the media items can be accumulated and processed as a batch in this manner, the ability to reduce transaction costs is achieved. Alternatively, 20 when the decision 508 determines that the purchase deferral limit has not yet been reached, then the operations 510 and 512 are bypassed. Following the operation 512, or its deferral, the payment processing 500 is complete until again invoked.

As an optional feature, the payment processing **500** could 25 be customized on a user (e.g., user account) basis. For example, those users that are deemed "good" users or "creditworthy" users can be given higher purchase deferral limits than other users. The advantage of increased purchase deferral limits is further reduction in transaction costs by addiional batching. As one example, a user can be deemed a "good" user if they are a frequent user, such as having already purchased fifty or more media items.

Another aspect of the invention is that a graphical user interface can allow users to access account information. By 35 accessing account information, a user is able to view their current account information and make changes thereto. The account information can include a purchase history for the account. The purchase history can provide the user with a list or report of those media items that have been previously 40 purchased using the user's account. FIG. 5B is a screen shot of a representative application program window 550 that displays purchase history information corresponding to a user's account. As shown in FIG. 5B, the purchase history can include information on the latest purchase, and can include 45 information pertaining to each of the media items purchased. For example, as shown in FIG. 5B, a table of the purchased media items is provided, with the table providing the information on item, artist, type, when downloaded, and price.

FIG. 6 is a flow diagram of media delivery processing 600 50 according to one embodiment of the invention. The media delivery processing 600 is, for example, performed by the media storage server 110 illustrated in FIG. 1.

The media delivery processing 600 begins with a decision 602. The decision 602 determines whether an access request 55 has been received. An access request is a request from a client to obtain the media content for one or more media items that are stored in a media store (e.g., media store 112) associated with the media storage server (e.g., media storage server 110). In one embodiment, the access request includes at least a 00 URL for the selected media item and a security token from the client. When the decision 602 determines that an access request has been received, then the media delivery processing 600 is effectively invoked. In other words, once an access request has been received, the access request is authenticated 604. The authentication 604 involves the analysis of at least a portion of the access request to authenticate that the request is

legitimate and from one that was authorized by the media commerce server. In one embodiment, a hash algorithm can be applied to the URL, a name of the media commerce server, a time of purchase. The result of the hash algorithm is then compared with the security token which is the product of a complimentary hash algorithm performed at the media commerce server. A decision **606** then determines whether the authentication was successful. Here, in one embodiment, if the hashing algorithm approach is used, the result of the hash algorithm should match the security token within some tolerance set by a time limitation. For example, the tolerance due to time might permit the access request to remain authenticate for forty-eight (48) hours after purchase.

When the decision 606 determines that the authentication was not successful, then an access denied indication is returned 608. Here, the access request is denied and the client is so notified. On the other hand, when the decision 606 determines that the authentication was successful, then an encrypted version of the selected media item that has been purchased is retrieved 610. Here, the media storage server would retrieve the encrypted version of the selected media item from the media store. Then, the encrypted version of the selected media item is sent 612 to the requestor (client). In other words, the encrypted version of the selected media item is downloaded to the client that has requested the selected media item. Following the operations 608 and 612, the media delivery processing 600 is complete and ends.

Another aspect of the invention pertains to a graphical user interface suitable for reviewing numerous media items. The graphical user interface is also suitable for previewing or purchasing media items in an on-line manner. The graphical user interface is presented to a user at a client (client machine). In one embodiment, the graphical user interface is presented to the user by an application program that runs on the client, such application program being referred to as a media player (see FIG. 1).

FIG. 7A is a diagram of an application program window 700 according to one embodiment of the invention. The application program window 700 includes a first sub-window 702 and a second sub-window 704. The first sub-window 702 presents information in a browser-like manner, while the second sub-window presents information in an applicationlike manner. In other words, the application program that is producing the application program window 700 can operate in a local mode manner in which case the content displayed in the application program window 700 would not include the first sub-window 702. However, in a remote mode, when the application program is interacting with a remote server, the application program window 700 can include the first subwindow 702 and the second sub-window 704 as shown in FIG. 7. In such an environment, the first sub-window 702 displays content provided by the remote server in a browserlike manner. This gives the user the feeling of interacting with the remote server in a browser-like style. However, in the second sub-window 704, the user of the application still retains the interface and thus the feel of interacting with the application program as it would as if the application was operating locally (local mode) instead of through interaction with the remote server. However, even in this case, the content for the second sub-window 704 can be retrieved from the remote server.

FIG. 7B is a screen shot of a representative application program window 720 according to one embodiment of the invention. The application program window 720 includes a first sub-window 722 and a second sub-window 724 which correlate to the first sub-window 702 and the second subwindow 704 of the application program window 700 shown in FIG. 7A. Additionally, the application program window 720 includes a source window 726. The source window 726 is shown listing a variety of different sources for media content. As shown in FIG. 7B, the source window 726 shows the source being a music store, as shown by highlight bar 727. The music store, in this embodiment, represents a remote media server that contains media (e.g., music) that can be purchased by a user of the application program. Hence, as shown in FIG. 7B, a user has performed a search 728 for music available on the music store by the artist that includes 10 the term "Reba". The results for the search 728 are the content that is provided by the remote media server to the application program. Such content is used to populate the region of the first sub-window 722 and the second sub-window 724. As shown in FIG. 7B, the first sub-window 722 includes three 15 regions, namely, a Top Albums region 722-1, a Top Songs region 722-2, and a Top Artists Region 722-3. The Top Albums region 722-1 references only a single album and thus depicts the album cover art 730 for that album as well as a "buy album" button 732. A user is able to purchase the album 20 indicated in the Top Albums region 722-1 by selecting the corresponding "buy album" button 732. Typically, if the user's account has been so configured, the user can buy the album by the single graphical user interface action of "clicking" on the "buy album" button 732. The Top Songs region 25 722-2 lists the top songs associated with the artist(s) or album (s) of the Top Albums region 722-1, and the Top Artists region 722-3 indicates the top artist(s) or album(s) associated with the Top Albums region 722-1.

In the second sub-window 724, a list of media items asso- 30 ciated with the one or more albums identified by the Top Albums region 722-1 are displayed. In one embodiment, the media items are displayed in a list-like manner that can resemble or mimic the technique utilized to present a list of media items to the user by the application program in cases 35 where the media source is local to the client (i.e., the media items are stored locally). Hence, although the media items specified within the second sub-window 724 are provided by the remote media server, they are presented in a manner that is sophisticated and frequently utilized by the application 40 program in other situations. As shown in FIG. 7B, a particular one of the media items within the list of media items has been selected as shown by a highlight bar 734. Further, any of the media items listed in the second sub-window 724 can be purchased by selection of the associated "buy song" button 45 736. Again, through a single graphical user interface action, such as "clicking" on the associated "buy song" button 736, the associated media item can be purchased. Further, as shown in FIG. 7B, for a given media item being displayed in the second sub-window 724, characteristic information about 50 the media item can be presented in a column-like fashion. The characteristic information, for example, includes song name, duration of song (time), artist, album, genre, relevance indication, and price.

Still further, the application program window 720 can display other controls or information. For example, the application program window 720 can display a play control 738. Upon selection of the play control 738, a preview audio clip pertaining to a selected one of the media items from the second sub-window 724 is played. Similarly, by "double 60 clicking" on a particular media item in the second sub-window 724, the associated preview audio clip can also be played. Hence, users deciding which media items to purchase are able to easily obtain and hear a preview audio clip. The application program window 720 can also include a browse 65 control 740. Upon selection of the browse control 740, a browse process is performed. The browse process is another

way (besides the search process) to identify media items of interest to the user. A search box 742 can also be provided within the application program window 720 to enable a user to perform a further search. Still further, an account area indication 744 provides an indication of whether a user account is active. For example, as shown in FIG. 7B, when an account identifier (such as an email address) for an authorized user is displayed in the account identifier region 744, the application program recognizes that the associated user of the account is logged on (signed in) and their account is active such that the user is able to purchase desired media content from the media store.

FIG. 8 is a flow diagram of media search processing 800 according to one embodiment of the invention. The media search processing 800 is, for example, performed by an application program operating on a client. The application program is, for example, the media player 108 illustrated in FIG. 1.

The media search processing 800 is activated once a user of the application program desires to perform a search in order to identify media content of interest to the user. Hence, a search dialog box is initially displayed 802 to the user. In this embodiment, we assume that the user desires to perform a sophisticated search using field-base restrictions. However, if the user just wants to perform a simple search using merely a term, then the search box 742 shown in FIG. 7B could be utilized. In any case, search criteria is entered 804. Then, a decision 806 determines whether a search is to be performed. When the decision 806 determines that a search is not to be performed, the media search processing 800 returns to repeat the operation 804 and subsequent operations so that the search criteria can be changed. However, once the decision 806 determines that a search is to be performed, then a search request is sent 808 to a remote media server. Here, in one example, the remote media server is the media commerce server 102 illustrated in FIG. 1. The search request is a request to the remote media server to perform a search in accordance with the search criteria. Here, the remote media server includes at least information (e.g., metadata) for a large number of media items that are available to be purchased from the remote media server, though the content of the media items that are purchased may be acquired at the client via download with respect to another remote server, such as the media storage server 110.

After the search request has been sent 808 to the remote media server, a decision 810 determines whether a response has been received. Here, the media search processing 800 waits until a response to the search request has been received back at the application program. Once the decision 810 determines that a response has been received, an application program window is produced or rendered by the application program. More specifically, a first window (e.g., first subwindow) of the application program window is rendered 812 with album related information. Additionally, a second window (e.g., second sub-window) of the application program window is rendered 814 so as to display media item information corresponding to the album related information. In one embodiment, the media item information can be displayed in the second window in a list format or in a row and column format.

For example, the search criteria of "Reba" and such was sent to the remote media server. The remote media server returned the album related information that is depicted in the first sub-window 722 illustrated in FIG. 7B, and the corresponding media item information depicted in the second subwindow 724 shown in FIG. 7B. In one embodiment, the response from the remote media server is a list media items (e.g., tracks) that result from a search request. The second window displays media item information for the media items (e.g., tracks) on the list of media items. The first window can display album related 5 information for the most relevant media items (e.g., tracks) on the list of media items.

At this point, the media search processing **800** has received search criteria and performed a search at a media server, and then returned results that are displayed in the first window and 10 the second window. At this point, and using graphical user interface components that are also provided within the first window and the second window, the user of the application program is able to further interact with the graphical user interface to perform other operations from the results view 15 such as shown in FIG. 7B.

FIG. 9 is a flow diagram of additional processing 900 according to one embodiment of the invention. The additional processing 900 is processing that can be invoked and performed by the application program following either the media 20 search processing shown in FIG. 8 or the media browse processing discussed below with reference to FIGS. 12A and 12B.

As shown in FIG. 9, a decision 902 determines whether a buy selection has been made. For example, with respect to 25 FIG. 7B, whether the user selected a "buy album" button 732 or a "buy song" button 736. When the decision 902 determines that a buy selection has been made, then media purchase processing 904 is performed. As an example, the media purchase processing 904 can be the media purchase process- 30 ing 200 shown in FIGS. 2A and 2B. Alternatively, when the decision 902 determines that a buy selection has not been made, then a decision 906 determines whether a preview selection has been made. For example, as noted above with respect to FIG. 7B, a preview can be selected through use of 35 a preview control 738 or by "double-clicking" on a particular media item listed within the second sub-window 724. In any case, when the decision 906 determines that a preview selection has been made, then a preview stream for the selected media item is requested 908 from the remote media server. 40 Here, the application program does not locally store the media content needed to preview media items. Hence, to preview a particular media item, the application program sends a preview request to the remote media server to instruct the media server to stream the preview for the selected media 45 item to the particular application program. Once the stream for the preview request has been initiated by the remote media server, the preview stream is played 901 at the application program, thereby permitting the user of the application program to hear the audio associated with the preview clip for the 50 selected media item.

On the other hand, when the decision 906 determines that a preview selection has not been made, then a decision 912 determines whether any of a variety of other selections have been made. The user is able to interact with an application 55 program window in a variety of different ways beyond search, buy and preview. For example, the user could interact with the graphical user interface to sort the media items in the second sub-window 724 in a different manner, or might request a browse operation using the browse control 740, might pro- 60 ceed to a home page for the music store, etc. These other types of processing can be performed at 914 when one or more such other selections are determined by the decision 912 to have been made. If the decision 912 determines that there are no other selections, then the media search processing 900 can 65 return to repeat the decision 902 and subsequent operations so that these additional operations or functionality that can be

utilized from the application program window are available. Following the operations **904**, **910** and **914**, the media search processing **900** is complete and ends.

Still another aspect of the invention pertains to a graphical user interface suitable for efficiently browsing through numerous media items. The graphical user interface is also suitable for purchasing media items in an on-line manner. The graphical user interface is presented to a user at a client (client machine). In one embodiment, the graphical user interface is presented to the user by an application program that runs on the client, such application program being referred to as a media player (see FIG. 1).

FIG. 10 is a diagram of an application program window 1000 according to one embodiment of the invention. The application program window 1000 is a graphical user interface. A user can interact with the graphical user interface to browse media items that are available on a remote server for purchase or preview. The remote server can, for example, include one or both of the media commerce server 102 and the media storage server 110 shown in FIG. 1.

The application program window 1000 includes a first sub-window 1002 and a second sub-window 1004. The first sub-window 1002 includes a first region 1002-1, a second region 1002-2, and a third region 1002-3. As shown in FIG. 10, the first region 1002-1 includes a first list 1006 of items. A user would interact with the first region 1002-1 to select one of the items in the first list 1006 of items. The selected item can then be highlighted 1008 (or otherwise visually distinguished). Once a particular item within the first list 1006 is selected and thus highlighted 1008, a request is sent to the remote server to identify the appropriate items for a second list 1010 of items that are displayed in the second region 1002-2. In other words, the remote server responds to the request with the items for the second list 1010 that are to be displayed within the second region 1002-2. Again, a user can interact with the second region 1002-2 to select one of the items within the second list 1010. The selected item can then be highlighted 1012 (or otherwise visually distinguished). Then, the selected and highlighted item 1012 causes a request to be sent to the remote server to obtain items that are associated with the selected and highlighted item 1012. The response from the remote server is one or more items that are displayed in a third list 1014 within the third region 1002-3. A user can interact with the third region 1002-3 to select one of the items within the third list 1014. The selected item can then be highlighted 1016 (or otherwise visually distinguished).

After one of the items within the third list 1014 has been selected and highlighted 1016, still another request can be sent to the remote server to obtain items that are associated with the selected and highlighted item 1016. In response to the request, the remote server supplies one or more items that are displayed in the second sub-window 1004. These items can be displayed in a variety of different ways and generally also include descriptive or characteristic information for each of the items. The one or more items can be displayed as a list or as a row and column (e.g., table) format. In one embodiment, the second sub-window 1004 is larger than each of the regions of the first sub-window 1002, and thus the second sub-window 1004 has additional display area for information pertaining to each of the media items being displayed therein. In one embodiment, the items being displayed in the second sub-window 1004 are media items. These media items can, for example, be songs, videos or images that can be previewed or purchased.

FIGS. **11A-11**C are screen shots illustrating successive views of a browse feature according to one embodiment of the invention.

FIG. 11A is a screen shot of an application program window 1100 according to one embodiment of the invention. The application program window 1100 includes a first sub-window 1102, a second sub-window 1104, and a third sub-window 1106. The first sub-window 1102 includes a first region 5 1102-1, a second region 1102-2 and a third region 1102-3. As shown in FIG. 11A, the first region 1102-1 is shown displaying a list of available genre (genre list) 1108. The second area 1102-2 displays the text "select genre" which is intended to inform the user to select one of the items within the genre list 10 1108 being displayed in the first region 1102-1.

FIG. 11B is a screen shot of an application program window 1120 after a user has selected one of the items within the genre list 1108 being displayed in the first region 1102-1. A selected item 1122 from the genre list 1108 can be highlighted 15 as shown in FIG. 11B. Once a user has selected one of the items within the list 1108 (selected genre), the second region 1102-2 can be populated with a list of artists (artist list) 1124 that are associated with the selected genre from the genre list 1108. The artist list 1124 is provided by the remote server to the application program that presents the application program window 1120. The third region 1102-3 displays the message "select artist" to encourage the user to select one of the artists from the artist list 1124 being displayed in the second region 1102-2.

FIG. 11C is a screen shot of an application program window 1140 after the user has selected one of the available artists from the artist list 1124 of the second region 1102-2. When a user has selected one of the artists (selected artist) 1144 from the artist list 1124 of the second region 1102-2, the 30 selected artist 1144 can be illustrated in a highlighted manner. Then, the third region 1102-3 displays one or more albums in an album list 1146. The albums within the album list 1146 are those albums that are the product of the selected artist 1144. The album list 1146 is provided by the remote server. When 35 the album list 1146 has a plurality of items, the user would select one of the items. However, as shown in FIG. 11C, the album list 1146 has but a single item (album). Hence, the single item is deemed selected. Once an item in the album list 1146 is selected, the second sub-window 1104 can be popu- 40 lated with a music list 1148 of the songs that are on the selected album. The music list 1148 can display descriptive information for each of the songs. For example, as shown in FIG. 11C, the song list 1148 is presented in a row and column (e.g., table) format with each row pertaining to a different 45 song on the selected album, and with the columns pertaining to song name, title, artist, album, genre, and price. Further, within the price column, each of the rows can include a "buy song" button 1150 that allows for ease of purchase of the particular song by the user. In one embodiment, the price is a 50 fixed price per song/track. For example, the fixed price could be \$0.99 per song.

FIGS. 12A and 12B are flow diagrams of media browse processing 1200 according to one embodiment of the invention. The media browse processing 1200 is, for example, 55 performed by a media player, such as the media player 108 operating on the client 104 illustrated in FIG. 1. The media player also communicates with a remote server (media server) to obtain information pertaining to available media content that can be viewed, presented, previewed or purchased. The remote server can, for example, include one or both of the media commerce server 102 and the media storage server 110 shown in FIG. 1.

The media browse processing **1200** initially displays **1201** a browse window with a list of selectable genre. The genre 65 within the list is provided by the remote server to the application program that produces the browse window. As an

example, the browse window can pertain to the application program window 1000, 1100, 1120 or 1140 shown in FIGS. 10 and 11A-11C.

Next, a decision 1202 determines whether a genre selection has been made. When the decision 1202 determines that a genre selection has not yet been made, the media browse processing 1200 awaits for the user to make such a selection. Once the decision 1202 determines that a genre selection has been made, then the selected genre is highlighted 1204. In addition, those available artists within the selected genre are requested 1206 from the remote server.

A decision 1208 then determines whether a response has been received from the remote server. When the decision 1208 determines that a response has not yet been received, the media browse processing 1200 awaits such a response. Once the decision 1208 determines that a response has been received, a list of selectable artists that are within the selected genre is displayed 1210. In other words, the response from the remote server identifies those selectable artists that are within the selected genre. The selectable artists are then displayed 1210 in the list of selectable artists. In one embodiment, while displaying the list of selectable artists, the list of selectable genre is also still displayed.

After the list of selectable artists is displayed 1210, a decision 1212 determines whether an artist selection has been made. Here, the user is able to interact with the browse window to select an artist from the list of selectable artists that is being displayed 1210. When the decision 1212 determines that an artist selection has not been made, the media browse processing 1200 awaits such a selection. Once the decision 1212 determines that an artist selection has been made, the selected artist is highlighted 1214. Then, available albums for the selected artist are requested 1216 from the remote server (media server). A decision 1218 then determines whether a response to the request has been received from the remote server. When the decision 1218 determines that a response has not yet been received, the media browse processing 1200 awaits such a response. Once the decision 1218 determines that a response has been received, a list of selectable albums for the selected artist is displayed 1220. The response from the media server in this case includes the selectable albums that were produced by the selected artist. In one embodiment, the list of selectable albums can be displayed 1220 while the list of selectable artists and the list of selectable genre are also concurrently being displayed.

After the list of selectable albums is displayed 1220, a decision 1222 determines whether an album selection has been made. When the decision 1222 determines that an album selection has not yet been made, the media browse processing 1200 awaits such a selection. When the decision 1222 determines that an album selection has been made, then media items that are on the selected album are requested 1224 from the media server. A decision 1226 then determines whether a response to the request has been received. When the decision 1226 determines that a response has not yet been received, then the media browse processing 1200 awaits such a response. When the decision 1226 determines that a response has been received, then a media item window is displayed 1228 having media item information corresponding to the selected album. Typically, the media item window would display a list of media items that correspond to the selected album. For example, the media items could be songs that are present on the selected album. For example, as shown in FIG. 11C, the second sub-window 1104 can pertain to the media item window and display a list of media items (songs) together with other descriptive or characteristic information pertaining to the media items.

Following the operation **1228**, the user can interact with the media item window to preview, sort, and purchase any of the media items. Such additional operations can be performed, in one embodiment, as shown in FIG. **9** discussed above.

Furthermore, the graphical user interface discussed above 5 with respect to FIGS. 10-12B was primarily discussed in terms of musical songs. However, as previously noted, the graphical user interface is generally applicable to browsing media items. For example, the media items can be video (e.g., DVDs), audio books or a grouping (e.g., charts). For example, 10 in the case of audio books, the graphical user interface might permit the user to first select "Audio books," then select a category, and then select an author. Once an author is selected, a list of available audio books could be displayed in another window, from which the user could preview and/or buy any of 15 the listed audio books. For example, with respect to the application program window 1000 shown in FIG. 10, in one embodiment, the first region 1002-1 can display a list of genre in which "audio books" is included as one genre, the second region 1002-2 can display a list of categories of audio books 20 (arts & entertainment, sports, history, etc.), and the third region 1002-3 can list the authors of having audio books in the selected category.

As another example, when the media items pertain to a grouping, the graphical user interface can enable a user to 25 browse the groupings. In one implementation, the groupings can pertain to charts. For example, the graphical user interface might permit the user to first select "charts," then select a particular chart, and then select a particular year for that chart. Once a year is selected, a list of media items (e.g., 30 songs) associated with the particular chart for the particular year can be displayed in another window, from which the user could preview and/or buy any of the listed media items. For example, with respect to the application program window 1000 shown in FIG. 10, in one embodiment, the first region 35 1002-1 can display a list of genre in which "charts" is included as one genre, the second region 1002-2 can display a list of charts (e.g., Billboard Hot 100, Rick Dees Weekly Top 40 Chart, etc.), and the third region 1002-3 can list the years for the selected chart. **4**0

One genre of music is "classical." The graphical user interface discussed above with respect to FIGS. 10-12B can also be used to browse classical music. For example, with respect to the application program window 1000 shown in FIG. 10, in one embodiment, the first region 1002-1 can display a list of 45 genre in which "classical" is included as one genre, the second region 1002-2 can display a list of artists of classical music (e.g., Mozart, Beethoven, etc.), and the third region 1002-3 can list the albums (CDs) of the selected artist. The one or more items that are displayed in the second sub- 50 window 1004 can be individual media items (e.g., tracks) or a grouping of media items (e.g., a group of tracks). For example, a media item "Piano Concerto No. 19" can be displayed in a row within the second sub-window 1004. However, such a media item can represent a grouping of different 55 movements, tempos, arrangements, etc., such as "Piano Concerto No. 19 In F, KV 459: Allegro Vivace," "Piano Concerto No. 19 In F, KV 459: Allegretto," and "Piano Concerto No. 19 In F, KV 459: Allegro Assai." The grouping can be displayed initially in a single row in a condensed fashion. In one 60 embodiment, besides a descriptor for the grouping, an indicator (e.g., symbol or icon) can be displayed at each row in the second sub-window 1004 in which the descriptor represents a grouping. The indicator can also be user-selectable so that the user can cause the single row to expand to a plurality of rows 65 as needed to display information on the individual media items (e.g., tracks) of the grouping. The indicator can thus

permit the user to view a grouping of media items in a compressed or an expanded fashion.

FIGS. **13**A-**13**B are screen shots illustrating additional features of a graphical user interface according to other embodiments of the invention. The screen shot shown in FIG. **13**A is similar to that shown in FIG. **11**C, and can be arrived at by similar processing.

FIG. 13A is a screen shot of an application program window 1300 according to another embodiment of the invention. The application program window 1300 includes a first subwindow 1302, a second sub-window 1304, and a third subwindow 1306. The first sub-window 1302 includes a first region 1302-1, a second region 1302-2 and a third region 1302-3. As shown in FIG. 13A, the first region 1302-1 is shown displaying a list of available genre (genre list) 1308. After user has selected one of the items within the genre list 1308, the selected item 1310 can be indicated by highlighting such as shown in FIG. 13A. The second area 1302-2 displays a list of artists (artist list) 1312 that are associated with the selected genre from the genre list 1308. Then, after the user has selected one of the available artists from the artist list 1312 of the second region 1302-2, the selected artist 1314 can be illustrated in a highlighted manner. The third region 1302-3 displays one or more albums in an albums list 1316. When the albums list 1316 has a plurality of items, the user would select one of the items. However, as shown in FIG. 13A, the albums list 1316 has but a single item (album). Hence, the single item is deemed selected. Once an item in the album list 1316 is selected, the second sub-window 1304 can be populated with a song list 1318 of the songs that are on the selected album. The song list 1318 can display descriptive information for each of the songs. For example, as shown in FIG. 13A, the song list 1318 is presented in a row and column (e.g., table) format with each row pertaining to a different song on the selected album, and with the columns pertaining to song name, title, artist, album, genre, and price.

At this point, the user has completed the browse operation and can then interact with the application program window 1300 in a variety of different ways. One way that the user can interact with the application program window 1300 is through use of a toggle control 1320. The toggle control 1320 is a button, image or other user interface control that is selectable by a user. The toggle control 1320, when selected, toggles the graphical user interface from the browse interface in the first sub-window 1302 to an informational mode.

FIG. 13B is a representative application program window 1350 that is displayed after the user interacts with the browse control 1320 shown in FIG. 13A. In such case, the first subwindow 1302 is altered to contain descriptive information for associated media items. In particular, for the example shown in FIG. 13B, the first sub-window 1302 contains an image 1352 associated with a selected album, information 1354 pertaining to the selected album, and a "buy album" button 1356 to facilitates a user's purchase of access rights to all the songs on the selected album. In this example, the particular selected album "Party Mix/Mesopotamia" by the B-52s was previously selected through a browse operation with respect to FIG. 13A. However, upon the user selecting the toggle control 1320, the graphical user interface alters the first subwindow 1302 to that shown in FIG. 13B. The resulting graphical user interface facilitates the user's review of the album that has been identified by the browse operation. The user can not only directly buy the album through use of the "buy album" button 1356, but can also review the information 1354 and the associated image 1352. In one embodiment, the price is a fixed price per album. For example, the fixed price could be \$9.99 per album. Additionally, the first sub-window

1302 can further include a Top Downloads region 1358 and a Related Items region 1360. The Top Downloads region 1358 can contain a list of the most frequently downloaded songs from the selected album. The Related Items region 1360 can contain a list of other songs that purchasers of the music from 5 the artist of the selected album have also bought.

In the representative application program window 1350 shown in FIG. 13B, the second sub-window 1304 may or may not change as compared to the second sub-window 1318 shown in FIG. 13A. However, in other embodiments, the 10 second sub-window 1318 can have its displayed list of songs changed or updated, or even be eliminated. Likewise, the third sub-window 1306 is not necessarily always present.

Further, it should be understood that the toggle control 1320 is also provided with the graphical user interface shown 15 in FIG. 13B. Hence, the user can interact with the toggle control 1320 as shown in FIG. 13B to return to the graphical user interface depicted in the application program window 1300 shown in FIG. 13A. Further, a user could have performed a music search to initially produce the application 20 program window 1350 shown in FIG. 13B. Such an approach would be an alternative to the use of the browse process such as depicted in FIG. 13A. In any case, through a search operation, the user can identify or locate a selected album and thus be presented with the graphical user interface shown in the 25 application program window 1350 shown in FIG. 13B. Then, should the user desire to enter a browse mode, the user can select the browse control 1320 shown in FIG. 13B and thus be presented with the graphical user interface provided with the application program window 1300 shown in FIG. 13A. In 30 other words, the user can use the browse control 1320 to transition between a browse mode and an informational mode

Still another feature associated with the invention is illustrated with respect to FIGS. 13A and 13B. The second sub- 35 window 1304 includes "buy song" buttons 1362 and "go to" buttons 1364, 1366 and 1368 for each of the songs listed in the second sub-window 1304. The "go to" buttons 1364, 1366 and 1368 are shown as small buttons with arrows symbols therein. As previously discussed, the "buy song" button 1362 40 can facilitate a user in easily purchasing access to the associated song. The selection of the "go to" button 1364 causes the first sub-window 1302 to display information pertaining to the associated artist (e.g., The B52s). The selection of the "go to" button 1366 causes the first sub-window 1302 to display 45 information pertaining to the associated selected album. For example, if the user had selected the "go to" button 1366 shown in FIG. 13A, the first sub-window 1302 would then display the album information such as shown in FIG. 13B. If the user selects the "go to" button 1368 of either the application program window 1300 or the application program window 1350, a genre window for would be presented in the first sub-window 1302 (and/or the second sub-window 1304). In this example, the genre window would pertain to the genre of "pop." From the genre window, the user could interact to 55 specify one or more selected genre and then proceed to locate music of interest.

Alternatively, when the media items being browsed as audio books, the "go to" button can cause a book page to be displayed and the buy buttons can indicate "buy book." Given 60 that the audio data to be downloaded in the case of an audio book is sizeable, in one embodiment, the audio data for the audio book can be divided into a plurality of files which are separately downloaded. The audio quality for audio books can also be reduced as compared to musical songs as another 65 means to reduce the amount of audio data required to be downloaded.

Still another aspect of the invention pertains to informing the users about explicit content that may be present in songs or albums. FIGS. 14A and 14B are screen shots illustrating explicit content notification features according to one embodiment of the invention.

FIG. 14A is a screen shot of an application program window 1400 according to one embodiment of the invention. The application program window 1400 includes a first sub-window 1402, a second sub-window 1404, and a third sub-window 1406. The first sub-window 1402 includes a Top Albums region 1402-1, a Top Songs region 1402-2, and a Top Artists region 1402-3. The Top Albums region 1402-1 contains those albums that match search criteria. For example, in this example, the search criteria was "trina" and the Top Albums regions 1402-1 depicts four separate albums that were identified by searching the music database with respect to the search criteria "trina". The Top Songs region 1402-2 includes a list of top songs with respect to any of the albums listed in the Top Albums regions 1402-1. The Top Artists region 1402-3 can represent the top artists with respect to the albums within the Top Albums region 1402-1. Alternatively, the Top Songs region 1402-2 in the top artists region 1402-3 could be top songs for the larger categories of genre, time period, or overall. Additionally, the second sub-window 1404 displays those songs that are associated with the albums within the Top Albums region 1402-1. In other words, the songs listed within the second sub-window 1404 are those songs that somehow relate to the search criteria.

It should also be noted that the application program window 1400 further includes explicit content indicators 1408 and clean content indicators 1410. In this regard, it is known that songs or albums can contain offensive language (e.g., expletives or other foul language) that is not appropriate for all audiences. Hence, albums or songs can be indicated as containing such explicit content through use of the explicit content indicator 1408. As shown in FIG. 14A, the explicit content indicator 1408 can be associated with an album, such as shown in the first sub-window 1402, and/or can be associated with individual songs, such as shown in the second sub-window 1404.

Further, in the case in which an album or song has explicit content, another version of the same album or song can be provided and thus made available for purchase with modifications to remove the explicit and potentially offending material. These types of songs or albums are indicated by the clean content indicator 1410.

If desired, a user can select one of the albums within the Top Albums region 1402-1 or through selection of one of the "go to" buttons 1414 for album information within the second sub-window 1404. If the user does select either the image 1412 or the "go to" button 1414, an application program window 1450 as shown in FIG. 14B would be produced according to one embodiment of the invention. In other words, the user selection was to select the album "The Great Depression" by DMX, namely, the explicit content version. As such, the first sub-window 1402 displays an image 1452 associated with the selected album, information 1454 pertaining to the album, and a "buy album" button 1456. Additionally, since the selected album has explicit content, the first sub-window 1402 can also display a parental advisory warning indication 1457 to alert potential purchasers that the selected album contains explicit content. The first sub-window 1402 can further include top downloads information 1458 and related song purchases information 1460. The second sub-window region 1404 can list those songs on the selected album. As shown in FIG. 14B, the selected album, "The Great Depression" contains seventeen songs or tracks,

each of which is identified by an explicit content indicator 1408, thereby indicating that each of the songs or tracks contains explicit content.

Another aspect of the invention pertains to modification of media descriptors that contain offensive language. For 5 example, media descriptors are often provided as titles to media items, such as albums, songs, videos or pictures. Occasionally, these media descriptors can contain offensive language. Hence, when media items are provided to a media store (or media database) to be stored and thus available for 10 subsequent purchase, these media items can be reviewed to determine whether any offensive language is present within their media descriptors. Alternatively, the review for offensive language in the media descriptors can be done dynamically as these media items are requested by various media 15 players. In either case, the offending portion of the media descriptors can be altered to remove the offensive language.

In one embodiment, each word within each of the media descriptors can be compared with a list of identified offending words stored in a file or database. For each offending word 20 found with a media descriptor, a portion of the offensive word in the media descriptor can be altered through use of replacement characters. As an example, as shown in FIG. 14A, one of the song names (e.g., media descriptors) on the selected album is "Nasty Bitch". However, the song name is displayed 25 as shown in FIG. 14A with a modified media designator 1416, namely, "Nasty B\*\*\*h". Hence, in this embodiment, the internal characters of the offending word "bitch" were altered and thus replaced with an asterisk. The user knows how many characters were replaced by the number of asterisks and thus 30 is provided with some context for the word even after it has been modified. However, once modified, the offending word is no longer offensive.

Another aspect of the invention pertains to a graphical user interface in which a scrolling type action that permits a user to 35 scroll or flip through media items being displayed in an efficient, user-friendly manner. In one embodiment, a graphical user interface action or control can cause update (or replacement) from a displayed set of media items to a next set of media items. The update can, for example, include a transition 40 effect when transitioning between different sets of media items.

FIG. 15A is a diagram of an application program window 1500 according to one embodiment of the invention. The application program window 1500 is, for example, produced 45 at a client machine by a media player, such as the media player 108 operating on the client 104 of FIG. 1. The application program window 1500 includes at least one sub-window 1502. Typically, the sub-window 1502 is associated with a category or grouping of media. Within the sub-window 1502 50 are displayed a plurality of media item representations 1504. As illustrated in FIG. 15A, the sub-window 1502 includes a first media item representation 1504-1, a second media item representation 1504-2, and a third media item representation 1504-3. For each of the media item representations 1504, the 55 sub-window 1502 depicts a text descriptor 1506 and an image descriptor 1508. For example, the text descriptor can be a name that corresponds to the media item, and the image descriptor 1508 can pertain to an image (e.g., artwork) that is associated with the media item. In one embodiment, the 60 image is rather small and thus can be referred to as a "thumbnail" image. In one implementation, the media items are albums of music, and thus the text descriptor 1506 pertains to the title of the album and the image descriptor 1508 pertains to the artwork of the album cover.

The sub-window **1502** typically displays only a small portion of the total number of media items that correspond to the 24

category or grouping of media associated with the sub-window 1502. As such, the user needs the ability to transition to a next set of media items. The application program window 1500 includes next controls 1510 and 1512 to assist the user in transitioning to a next set of media items. The next control 1510 permits the user to transition to the left, and the next control 1512 allows the user to transition to the right. As discussed in more detail below with respect to FIG. 16, the content for the sub-window 1502, either initially or following the selection of one of the next controls 1510 and 1512 is provided by a remote server that stores the media item information that is displayed within the sub-window 1502. For example, the remote server can, in one embodiment, pertain to the media commerce server 102 illustrated in FIG. 1.

FIG. 15B is a diagram of a window 1520 according to one embodiment of the invention. The window 1520 is, for example, suitable for use as the sub-window 1502 illustrated in FIG. 15A. The window 1520 can also be considered a frame. In any case, the window 1520 includes window (frame) objects that pertain to objects of the window 1520 (frame). As shown in FIG. 15B, the window 1520 includes a display region 1522 and next controls 1524 and 1526. The display region 1522 represents a portion of the window 1520 that displays server-provided information pertaining to a of the media items available from the server. The next controls 1524 and 1526 are used by a user to request a next set of the media items available from the server. In particular, when the next control 1522 is selected, a load window (load frame) request is sent to the server. In one embodiment, the next control 1524 is an object of the window 1520 (frame) and contains information on the next set of the media items as well as a transition effect therefor. The transition effect can have various characteristics and styles that provide an animated transition between the display of a current set of media items and a subsequent set of media items. Although various transition effects can be used, some examples of transition effects are wipe, dissolve, drop-in, etc. Also the transition effect can have an acceleration/deceleration or speed characteristics that can, if provided, control the rate (e.g., speed and/or acceleration) of the transition effect (animation). Even with the transition effect, the new content for the display portion 1522 is display such that the next controls 1524 and 1526 are on top of the display region 1522. In other words, the animation (transition) effect causes the new content for the display portion 1522 to arrive in the display portion 1522 in a manner that is underneath the next controls 1524 and 1526. Similarly, if desired, the boundary of the window 1520 and the display region 1522 can have a shading effect, such shading effect can be an object of the frame and can also be displayed over top of the display region 1522. The server-provided information in response to the request is, for example, a markup language document (e.g., XML) that describes the layout therefore and its objects as well as contains links for data (e.g., artwork, title) for each of the media items within the set being displayed. In one embodiment, the frame can be displayed like a composite image such that back-to-front with the content for the display region 1522 being in the back and the other possible frame features (objects) being in the front, e.g., the next controls and a shading effect. The window 1520 can also include a position indicator 1528 that informs the user of the relative position within the various media items that are associated with and able to be displayed within the display portion 65 1522 (see also FIG. 15C).

FIG. 15C is a screen shot of an application program window 1550 according to one embodiment of the invention. The

application program window 1550 represents one implementation of the application program window 1500 illustrated in FIG. 15A.

The application program window 1550, although produced by an application program, is presented in a network browser 5 style, and thus looks like a web page in many respects. The application program window 1550, among other things, includes a first sub-window 1552, a second sub-window 1554, a third sub-window 1556, and a fourth sub-window 1558. Each of the sub-windows 1552-1558 displays four 10 media items. More particularly, for each media item within each of the sub-windows 1552-1558, media information for each of the four media items is displayed. In one embodiment, for each media item being displayed within one of the subwindows 1552-1558, the media item information being pre- 15 sented includes an album title 1560, an artist 1562, and album artwork 1564. The different sub-windows 1552-1558 represent different groupings or categories that the albums can be arranged in. In FIG. 15C, the exemplary groupings or categories are New Releases, Just Added, Staff Favorites, and Com- 20 pilations. In one embodiment, each of the sub-windows 1552-1558 pertains to a frame. For example, a frame boundary 1559 surrounds the sub-window 1552.

Hence, the user can simultaneous view the basic information on four media items (e.g., albums) within each of the 25 sub-windows 1552-1558. However, when the user desires to view other albums within one of the groups or categories, then the user can select one of the next controls 1566 and 1568. For example, with respect to the first sub-window 1552, the user is able to transition to the left using the next control 1566, or 30 transition to the right using the next control 1568. The other sub-windows 1554-1558 similarly have next controls. Upon the user's selection of the next control 1568, a next set of four albums would be requested from the remote server, and then when received, would be displayed within the first sub-win- 35 dow 1552, thereby replacing the four media items previously displayed therein. The transition from the former set of media items to a next set of media items can be performed with an animated transition such that the user is shown the effect of the transition or scroll to the next set.

Additionally, the application program window 1550 shown in FIG. 15C includes a top song downloads region 1570 and a top albums download region 1572. The top song downloads region 1570 includes a list of the top songs that have been downloaded from the music store that is offering the various 45 media items for purchase. The top albums download region 1572 displays a list of top albums that have been downloaded by users of the music store.

In one embodiment, the set of media data for the associated sub-window provided in a markup language format. In one 50 example, the markup language format is extensible Markup Language (XML) based. In the case where the media items are albums, such as shown in FIG. 15C, the artwork images are thumbnail sized so that the amount of data associated with a set of media data is relatively small and thus easily trans- 55 tations of the invention described above can be used alone or mitted over a network from the remote server.

FIG. 16 is a flow diagram of media page processing 1600 according to one embodiment of the invention. The media page processing 1600 is, for example, performed by a media player, such as the media player 108 operating on the client 60 104 illustrated in FIG. 1. The media page processing 1600 can be performed by an application program to produce an application program window, such as the application program window 1500 illustrated in FIG. 15A and the application program window 1550 illustrated in FIG. 15B. 65

The media page processing 1600 is activated whenever a base page is to be presented within an application program window. Once the media page processing 1600 begins, a base page is requested 1602 from a remote server. The remote server is, for example, the media commerce server 102 illustrated in FIG. 1. The base page can vary with implementation but has the characteristics shown in FIGS. 15A and 15B with respect to a sub-window and next controls.

A decision 1604 then determines whether the base page has been received from the server. Once the decision 1604 determines that the base page has been received, then the base page is displayed 1606. At this point, the base page is presented on a display screen and includes at least one sub-window and at least one next control.

Then, a decision 1608 determines whether a next control selection has been made. When the user interacts with the base page to select the next control, then a next control selection has been made. However, the user may interact with the base page in a variety of different ways, including a next control selection or a preview request, or not at all. When the decision 1608 determines that a next control selection has not been made, then a decision 1610 determines whether a preview request has been made. When the decision 1610 determines that a preview request has not been made, then other processing 1612 can be performed and then the media page processing 1600 can return to repeat the decision 1608 and subsequent blocks. Alternatively, when the decision 1610 determines that a preview request has been made, then preview content is requested 1614 from the remote server. A decision 1616 then determines whether the preview content has been received. Once the decision 1616 determines that the preview content has been received, then the preview content is presented 1618. In one embodiment, the presentation 1618 of the preview content causes the preview content to be played. In one example, the preview content is a short audio file that is played by the media player for the benefit of the user. Following the operation 1618, the media page processing 1600 returns to repeat the decision 1608 and subsequent operations

On the other hand, when the decision 1608 determines that a next control selection has been made, then a next set of media data for the associated sub-window is requested 1620. A decision 1622 then determines whether the next set of media data has been received. When the decision 1622 determines that the next set of media data has been received, then a next set of media data is presented 1624 in the associated sub-window. Typically, the next set of media data completely replaces the previous set of media data residing within the associated sub-window. An animated transition between the prior set of media data and the new set of media data can be performed to facilitate user awareness of the transitioning or updating operation. Following the operation 1624, the media page processing 1600 returns to repeat the decision 1608 and subsequent operations so that additional user interactions can be processed.

The various aspects, features, embodiments or implemenin various combinations.

The media items can pertain to audio items (e.g., audio files or songs, such as for music or audiobooks), video items (e.g., video files or movies), or image items (e.g., photos).

The invention is preferably implemented by software, but can also be implemented in hardware or a combination of hardware and software. The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the computer readable medium include read-only memory, random-access memory, CD-ROMs, DVDs, magnetic tape, optical data storage devices, and carrier waves. The computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

The advantages of the invention are numerous. Different embodiments or implementations may, but need not, yield one or more of the following advantages. One advantage of the invention is that purchased media items are able to be securely downloaded to a user's machine. Another advantage 10 of the invention is that media items can be purchased with a single user interface action. Still another advantage of the invention is that media items available for purchase can be searched or browsed in an efficient, user-friendly manner. Yet another advantage of the invention is that media items having 15 offensive content or descriptors can be distinguishably displayed and/or altered to signal the presence of or remove of the offensive matter.

The many features and advantages of the present invention are apparent from the written description and, thus, it is 20 intended by the appended claims to cover all such features and advantages of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, the invention should not be limited to the exact construction and operation as illustrated and described. 25 Hence, all suitable modifications and equivalents may be resorted to as falling within the scope of the invention.

#### What is claimed is:

1. A network-based media purchase system, said system 30 being configured to support a plurality of client media player programs, each of said client media player programs being resident on a different client machine, said system comprising:

- a media storage server machine that stores media items in 35 an encrypted format; and
- a media commerce server machine programmed to interact with each of said client media player programs, and said media commerce server machine being programmed to support operations on said client media player programs, wherein said client media player programs are programmed to: (i) initiate payment for the media items, (ii) download the media items that have been purchased, (iii) store the media items, and (iv) subsequently use the stored media items, 45
- wherein, for a particular one of the media items, said media commerce server machine is further programmed to: (i) determine media access information pertaining to the particular media item; and (ii) send, over the network, the media access information to the client machine of the user that has purchased the particular media item, the media access information adapted to be used by the client machine to access the particular media item,
- wherein the media access information includes (i) a URL to the particular media item at said media storage server 55 machine that stores the particular media item, (ii) a security token, and (iii) a download key,
- wherein said media commerce server machine is further programmed to create the security token provided in the
- media access information by applying a predetermined 60 algorithm to at least the URL and an identifier for said media commerce server machine,
- wherein said media storage server machine is programmed to receive, via the client machine that has purchased the particular media item, a request for the particular media 65 item from said media storage server machine, the request including at least the URL to locate the particu-

lar media item and using the security token to provide authentication for download of the particular media item, and

wherein said media storage server machine is further programmed to create, in response to receiving the request from the client machine of the user, a resultant value by applying the predetermined algorithm to at least the URL and the identifier for said media commerce server machine to produce the resultant value, wherein said media storage server machine is further programmed to compare the resultant value with the security token received in the request and to determine whether the security token received in the request matches the resultant value, and wherein said media storage server machine is further programmed to permit the particular media item to be downloaded to the client machine from said media storage server machine if the resultant value is determined to match the security token.

2. A network-based media purchase system as recited in claim 1, wherein said media commerce server machine is further configured to enable each of the client media player programs to purchase media items by enabling the client media player programs to receive media access information from said media commerce server machine, at least a first part of the media access information being used to decrypt the media items from their encrypted format.

3. A network-based media purchase system as recited in claim 1, wherein each of the media player programs produce a graphical user interface on the corresponding client machine, the graphical user interface including at least a first window and a second window.

4. A network-based media purchase system as recited in claim 3, wherein the first window displays first information provided remotely by said media commerce server machine in a browser-like manner, and wherein the second window displays second information in an application-like manner, the second information being provided locally by the client media player program operating on the corresponding client machine or being provided remotely by said media commerce server machine.

5. A network-based media purchase system as recited in claim 4, wherein the second window displays a list of available media items that are associated with at least one criteria.

6. A network-based media purchase system as recited in claim 5, wherein each item in the displayed list of media items has a buy button, and wherein selection of the buy button causes the selected media item to purchased.

7. A network-based media purchase system as recited in claim 5, wherein selection of one of the items in the displayed list of media items causes the graphical user interface to display an image associated with the selected media item.

8. A network-based media purchase system as recited in claim 7, wherein the selected media item is a song, and the image associated therewith is an album cover image for an album including the song.

9. A network-based media purchase system as recited in claim 5, wherein any of the available media items in the displayed list of media items can be previewed on request by a graphical user interface action.

10. A network-based media purchase system as recited in claim 1,

wherein each of the media player programs produce a graphical user interface having at least a list of available media items that are associated with at least one criteria, and

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wherein any of the available media items in the displayed list of media items can be previewed on request by a graphical user interface action.

11. A network-based media purchase system as recited in claim 10, wherein each item in the displayed list of media 5 items has a buy button, and wherein selection of the buy button causes the selected media item to be purchased with no other required user interaction.

12. A network-based media purchase system as recited in residual claim 10, wherein any of the available media items in the 10 ing: displayed list of media items can be previewed without having an account with said media commerce server machine.

13. A network-based media purchase system as recited in claim 4, wherein the second window displays a list of available media items that are available for purchase and are asso-15 ciated with at least one criteria.

14. A network-based media purchase system as recited in claim 13, wherein the at least one criteria can be provided via the graphical user interface through browsing, sorting or searching the media items that are available for purchase. 20

15. A network-based media purchase system as recited in claim 13, wherein selection of one of the items in the displayed list of media items causes the graphical user interface to display an image associated with the selected media item.

16. A network-based media purchase system as recited in <sup>25</sup> claim 15, wherein the selected media item is a song, and the image associated therewith is an album cover image for an album including the song.

17. A network-based media purchase system as recited in claim 15, wherein any of the available media items in the <sup>30</sup> displayed list of media items can be previewed on request by a graphical user interface action.

18. A network-based media purchase system as recited in claim 17, wherein any of the available media items in the displayed list of media items can be previewed without having an account with said media commerce server machine.

19. A network-based media purchase system as recited in claim 1, wherein after the media items have been stored to the client machines, the media items can be decrypted and presented at the client machines.

20. A network-based media purchase system as recited in claim 19, wherein the media items are presented at the client machines by playing the media items.

21. A network-based media purchase system as recited in claim 20, wherein the media items are audio and/or video files.

22. A network-based media purchase system as recited in claim 19, wherein the media items can only be presented at the client machines that are authorized to present the particular media items.

23. A network-based media purchase system as recited in claim 1, wherein the client machines can operatively connect to said media commerce server machine and said media storage server machine via a network.

24. A network-based media purchase system as recited in claim 1, wherein the client machines can operatively connect to said media commerce server machine and said media storage server machine via a network, and wherein the client media player programs communicate with said media storage 60 server machine and said media commerce server machine via the network.

25. A network-based media purchase system as recited in claim 1, wherein said network-based media purchase system enables users of the client media player programs to establish accounts with said media commerce server machine so that media items can be purchased.
25. A network-based media purchase system as recited in the client media player programs to establish accounts with said media commerce server machine so that media items can be purchased.

26. A network-based media purchase system as recited in claim 25, wherein said media commerce server machine maintains a purchase history for each of the users of the client media player programs that have established accounts with said media commerce server machine.

27. A network-based media purchase system, said system being configured to support a plurality of client media player programs, each of said client media player programs being resident on a different client machine, said system comprising:

- a media storage server machine that stores media items in an encrypted format; and
- a media commerce server machine programmed to interact with each of said client media player programs, and said media commerce server machine being programmed to support operations on said client media player programs, wherein said client media player programs are programmed to: initiate payment for purchase of the at least one media item, and download and store the at least one media item that has been encrypted for storage on the client machine operating the one of said client media player programs,
- wherein, for a particular one of the media items, said media commerce server machine is further programmed to: (i) determine media access information pertaining to the at least one media item; and (ii) send, over the network, the media access information to the client machine of the user that has purchased the at least one media item, the media access information adapted to be used by the client machine to access the at least one media item,
- wherein the media access information includes (i) a URL to the at least one media item at said media storage server machine that stores the at least one media item, (ii) a security token, and (iii) a download key,
- wherein said media commerce server machine is further programmed to create the security token provided in the media access information by applying a predetermined algorithm to at least the URL and an identifier for said media commerce server machine,
- wherein said media storage server machine is programmed to receive, via the client machine that has purchased the at least one media item, a request for at least one media item from said media storage server machine, the request including at least the URL to locate the at least one media item and the security token to provide authentication for download of the at least one media item, and
- wherein said media storage server machine is further programmed to create, in response to receiving the request from the client machine, a resultant value by applying the predetermined algorithm to at least the URL and the identifier for said media commerce server machine to produce the resultant value, wherein said media storage server machine is further programmed to compare the resultant value with the security token received in the request matches the resultant value, and wherein said media storage server machine is further programmed to permit the at least one media item to be downloaded to the client machine from said media storage server machine if the resultant value is determined to match the security token.

28. A network-based media purchase system as recited in claim 27, wherein the media items can only be presented at the client machines that are authorized to present the media items.

29. A network-based media purchase system as recited in claim 27, wherein said network-based media purchase system

enables users of the client media player programs to establish accounts with said media commerce server machine so that media items can be purchased.

30. A network-based media purchase system as recited in<br/>claim 27, wherein said media commerce server machine per-<br/>mits subsequent downloading of the media items that have<br/>been purchased until the corresponding client player program<br/>confirms receipt of the media items that have been purchased.37. A<br/>claim 1,<br/>where<br/>dev<br/>where

**31**. A network-based media purchase system as recited in claim **27**, wherein said media commerce server machine 10 enables each of said client media player programs to purchase the media items at a fixed price per media item.

**32**. A network-based media purchase system as recited in claim **27**, wherein the media items are audio songs.

**33**. A network-based media purchase system as recited in 15 claim **27**, wherein the media items are groups of audio songs.

34. A network-based media purchase system as recited in claim 27, wherein the media items are one or more of audio songs, videos, audiobooks.

**35**. A network-based media purchase system as recited in 20 claim 1,

- wherein each of the client machines include a local storage device,
- wherein the media items being purchased are stored at said media storage server machine in the encrypted format, 25 the encrypted format utilizing the download key to encrypt the media items stored on said media storage server machine, and
- wherein at least one of said client media player programs is configured to: (i) retrieve, from said media storage 30 server machine, a particular media item that has been purchased, the particular media item being encrypted; (ii) decrypt the particular media item using the download key; (iii) acquire a user key associated with a user account of a purchaser of the particular media item; (iv) 35 re-encrypt the particular media item using the user key; and (v) store the particular media item to the local storage device associated with the at least one of the client machines.

36. A network-based media purchase system as recited in 40 claim 1,

wherein each of the client machines include a local storage device,

- wherein the media items being purchased are stored at said media storage server machine in the encrypted format, 45 the encrypted format utilizing the download key to encrypt the media items stored on said media storage server machine, and
- wherein at least one of said client media player programs is configured to: (i) receive, over the network, a buy 50 request from a user requesting to buy a particular media item, the buy request being initiated by the user through a single graphical user interface action by the user once an identifier for the particular media item is displayed on a display screen for the user, and the buy request includ- 55 ing an account identifier for a user account associated with the user; (ii) initiate payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account 60 associated with the user; (iii) retrieve, from said media storage server machine, the particular media item that has been purchased, the particular media item being encrypted; (iv) decrypt the particular media item using the download key; (v) acquire a user key associated with 65 a user account of a purchaser of the particular media item; (vi) re-encrypt the particular media item using the

user key; and (vii) store the particular media item to the local storage device associated with the at least one of the client machines.

37. A network-based media purchase system as recited in aim 1.

- wherein each of the client machines include a local storage device.
- wherein the media items being purchased are stored at said media storage server machine in the encrypted format, the encrypted format utilizing the download key to encrypt the media items stored on said media storage server machine, and
- wherein at least one of said client media player programs is further configured to: (i) retrieve, from said media storage server machine, a particular media item that has been purchased, the particular media item being encrypted; (ii) acquire a user key associated with a user account of a purchaser of the particular media item; (iii) transcrypt the particular media item using the download key and a user key; and (iv) store the particular media item to the local storage device associated with the at least one of the client machines.

38. A network-based media purchase system as recited in claim 1,

- wherein each of the client machines include a local storage device.
  - wherein the media items being purchased are stored at said media storage server machine in the encrypted format, the encrypted format utilizing the download key to encrypt the media items stored on said media storage server machine, and
  - wherein at least one of said client media player programs is configured to: (i) receive, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user through a single graphical user interface action by the user once an identifier for the particular media item is displayed on a display screen for the user, and the buy request including an account identifier for a user account associated with the user; (ii) initiate payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user; (iii) retrieve, from said media storage server machine, the particular media item that has been purchased, the particular media item being encrypted; (iv) acquire a user key associated with a user account of a purchaser of the particular media item; (v) transcrypt the particular media item using the download key and a user key; and (vi) store the particular media item to the local storage device associated with the at least one of the client machines.

**39**. A network-based media purchase system as recited in claim **1**,

wherein at least one of said client media player programs is configured to: (i) receive, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user through a single graphical user interface action by the user once an identifier for the particular media item is displayed on a display screen for the user, and the buy request including an account identifier for a user account associated with the user; and (ii) initiate payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user. 40. A network-based media purchase system as recited in claim 1, wherein said media store server machine permits the at least one of the client machines to further operate to repeatedly attempt to retrieve the particular media item from said remote storage server machine until the at least one of the 5 client machines confirms receipt of the particular media item.

41. A network-based media purchase system as recited in claim 1, wherein said media store server machine permits the at least one of said client media player programs to further operate to repeatedly attempt to retrieve the particular media 10 item from said remote storage server machine until the at least one of the client machines confirms receipt of the particular media item.

42. A network-based media purchase system as recited in claim 10, wherein each item in the displayed list of media 15 items has a buy button, and wherein selection of the buy button causes the selected media item to purchased with no other required user interaction and a subsequent a single user interface action to acknowledge a purchase confirmation message.

43. A network-based media purchase system as recited in claim 1,

- wherein the media access information further include a time of purchase of the particular media item, and
- wherein, in producing the resultant value, said media storage server machine applies the predetermined algorithm to at least the URL, the identifier for said media commerce server machine, and the time of purchase.

44. A network-based media purchase system as recited in claim 43, wherein the particular media item is permitted to be retrieved from said remote storage server machine only if the resultant value matches the security token within a given time tolerance as to the time of purchase.

**45**. A network-based media purchase system as recited in claim **44**, wherein the time tolerance permits the particular media item to be retrieved only if requested within the given time tolerance from the time of purchase.

\* \* \* \* \*

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO.	: 7,797,242 B2
APPLICATION NO.	: 10/833267
DATED	: September 14, 2010
INVENTOR(S)	: Patrice Gautier et al

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 25, line 50, after "sub-window" insert -- is --.

Signed and Sealed this Twenty-ninth Day of November, 2011

land J. b 1208

David J. Kappos Director of the United States Patent and Trademark Office

# **EXHIBIT 8**

# RATION AND POWER OF ATTORNEY FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. APL1P270X1/P3059USX1

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: METHOD AND SYSTEM FOR NETWORK-BASED PURCHASE AND DISTRIBUTION OF MEDIA the specification of which,

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( CHC	CUK.	UII	-,

one)	1. is attached hereto.		8 FYHIRIT
	2. X was filed on <u>April 26, 2004</u> U.S. Application No. <u>10/833,267</u> and was amended on	as	
	3. was filed on International PCT Application No and was amended on	as	

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, CFR § 1.56.

#### **Prior Foreign Application(s)**

I hereby claim foreign priority benefits under Title 35, United States code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

			Priority Benefits Claimed? Yes No
(Application No.)	(Country)	(Filing Date)	
			Yes No
(Application No.)	(Country)	(Filing Date)	· · · · · · · · · · · · · · · · · · ·

**Provisional Application(s)** 

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

60/465,410	April 25, 2003
(Application No.)	(Filing Date)
60/534,555	January 5, 2004
(Application No.)	(Filing Date)

Atty. Dkt. No.: APL1P270X1/P3059USX1 (Revised 03/00)

Page 1

#### Prior U.S. Application(s)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

10/776,403	February 10, 2004	Abandoned
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)

Power of Attorney

And I hereby appoint the law firm of Beyer Weaver & Thomas, LLP and all practitioners who are associated with the Customer Number 022434 as my principal attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

**Direct Correspondence To:** 

#### Customer Number: 022434

Direct Telephone Calls To:

C. Douglass Thomas at telephone number (650) 961-8300

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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Atty. Dkt. No.: APL1P270X1/P3059USX1 (Revised 03/00)

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Atty. Dkt. No.: APL1P270X1/P3059USX1 (Revised 03/00)

## FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. APL1P270X1/P3059USX1

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: <u>METHOD AND SYSTEM FOR NETWORK-BASED PURCHASE AND DISTRIBUTION OF MEDIA</u> the specification of which,

(check one)

1.	is attached hereto.	
2.	Was filed on April 26, 2004 U.S. Application No 10/833,267	as
3.	and was amended on	, as
	International PCT Application Noand was amended on	

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, CFR § 1.56.

#### Prior Foreign Application(s)

l hereby claim foreign priority benefits under Title 35, United States code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

(Application No.)	(Country)	(Filing Date)	Yes No
(Application No.)	(Country)	(Filing Date)	Yes No
Bravigianal Application (a)			

#### Provisional Application(s)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

<u>60/465,410</u> (Application No.)

<u>60/534,555</u> (Application No.) April 25, 2003 (Filing Date)

\_\_\_\_\_\_ <u>Jan</u> (Fil

January 5, 2004 (Filing Date)



#### Prior U.S. Application(a)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, J acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

10/776.403	February 10, 2004	Abandoned	
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)	
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)	

**Power of Attorney** 

And I hereby appoint the law firm of Beyer Weaver & Thomas, LLP and all practitioners who are associated with the Customer Number 022434 as my principal attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Direct Correspondence To:

Customer Number: 022434

22434

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C. Douglass Thomas at telephone number (650) 961-8300

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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	4		Date of Signature	
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Residence:	(City)	Los Altos	(State/Country)	<u>CA/US</u>
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Fifth Inventor:		Dave Heller	Citizenship:	USA
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		•		4.

# EXHIBIT 9

Attorney Docket No. APL1P270X1/P3059X1

## PATENT APPLICATION

### **METHOD AND SYSTEM FOR NETWORK-BASED** PURCHASE AND DISTRIBUTION OF MEDIA

Assignee: Apple Computer, Inc.

EXHIBIT

**BEYER WEAVER & THOMAS, LLP** (650) 961-8300



#### METHOD AND SYSTEM FOR NETWORK-BASED PURCHASE AND DISTRIBUTION OF MEDIA

#### CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a Continuation-In-Part of U.S. Patent Application No. 10/776,403, filed February 10, 2004, and entitled "METHOD AND SYSTEM FOR NETWORK-BASED DISTRIBUTION OF MEDIA", which is hereby incorporated by reference herein, and which claims the benefit of: (i) U.S. Provisional Patent Application No. 60/465,410, filed April 25, 2003, and entitled "METHOD AND SYSTEM FOR SECURE NETWORK-BASED DISTRIBUTION OF MEDIA", which is hereby incorporated by reference herein; and (ii) U.S. Provisional Patent Application No. 60/534,555, filed January 5, 2004, and entitled "GRAPHICAL USER INTERFACE FOR BROWSING, SEARCHING AND PRESENTING MEDIA ITEMS", which is hereby incorporated by reference herein.

[0002] In addition, this application claims priority benefit of: (i) U.S. Provisional Patent Application No. 60/465,410, filed April 25, 2003, and entitled "METHOD AND SYSTEM FOR SECURE NETWORK-BASED DISTRIBUTION OF MEDIA", which is hereby incorporated by reference herein; and (ii) U.S. Provisional Patent Application No. 60/534,555, filed January 5, 2004, and entitled "GRAPHICAL USER INTERFACE FOR BROWSING, SEARCHING AND PRESENTING MEDIA ITEMS", which is hereby incorporated by reference herein.

[0003] This application is also related to: (i) U.S. Patent Application No. \_\_\_\_\_\_, filed concurrently, and entitled "GRAPHICAL USER INTERFACE FOR BROWSING, SEARCHING AND PRESENTING MEDIA ITEMS", which is hereby incorporated by reference herein; and (ii) U.S. Patent Application No. \_\_\_\_\_\_, filed concurrently, and entitled "METHOD AND SYSTEM FOR SECURE NETWORK-BASED DISTRIBUTION OF CONTENT", which is hereby incorporated by reference herein.

#### **BACKGROUND OF THE INVENTION**

#### **Field of the Invention**

[0004] The present invention relates to media purchase and distribution and, more particularly, to media purchase and distribution in a client-server environment.

#### **Description of the Related Art**

**[0005]** Traditionally, music has been purchased at music stores or music departments of larger stores. A consumer will visit the music store or department and manually browse for albums or compact discs (CDs) of interest. Often, the music in the music store or department is categorized by genre, and then indexed by artist. For example, genre can include rock, country, pop, soul, jazz, etc. After the consumer selects an album or CD of interest, the consumer proceeds to a check-out register to pay for the album or CD being purchased.

**[0006]** In recent years music delivery or distribution over the Internet has become popular. Due to the advances in efficient file formats, such as MP3 and MPEG4, the size of media files have become small enough to make their download via the Internet practical. Also, technological advances have led to higher-speed Internet connections and lower cost of memory. The combination of these advances make downloading media files, such as for music and videos, manageable and not too time consuming.

[0007] One popular approach to music distribution was mp3.com which uses a centralized server for storage of the numerous songs that are available for download. Another popular approach to music distribution was Napster in which peer-to-peer sharing was utilized. With peer-to-peer sharing, the numerous songs reside on the user machines of the many users, not on a centralized server.

[0008] However, unrestricted use and distribution of music files can lead to copyright violations. It is, therefore, desirable for companies to be endorsed by the music industry. However, to obtain endorsement, companies must charge users for access to the songs. Some companies charge a monthly subscription fee and permit subscribers to play songs by streaming such to the subscriber's machine where the songs are played. Streaming does not store the music files on the subscriber's machine, and thus is less of a concern for the music industry. However,

such a system requires a network connection and network availability in order for subscribers to play songs.

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**[0009]** As a result, there is a need to permit songs to be purchased and then made available locally to purchasers so that the purchaser is not dependent and constrained by the availability of a network connection for playback of the songs. However, the music industry requires its songs be secured against unauthorized copying or other copyright violations. Thus, there is also the need to incorporate security measures to restrain the susceptibility to unauthorized use or distribution of the songs.

#### SUMMARY OF THE INVENTION

[0010] Broadly speaking, the invention relates to network-based purchase and distribution of media. The purchase and distribution of media are not only secure but also controlled. The security restricts access to media within media files during downloads as well as while stored at a server and/or client.

**[0011]** One aspect of the invention pertains to a system and method for purchasing media items over a network. A potential purchaser can search and browse through numerous media items on-line that are available for purchase. The potential purchaser can thereafter purchase one or more media items on-line with great ease. Upon purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item can be encrypted for the purchaser's use before or after download to the purchaser. The encrypted content for the media item can then be stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item).

[0012] The invention can be implemented in numerous ways, including as a method, system, device, apparatus, graphical user interface, or computer readable medium. Several embodiments of the invention are discussed below.

[0013] As a method for purchasing access to a media item over a network, one embodiment of the invention includes at least the acts of: receiving, over the network, a buy request from a user requesting to buy a particular media item, the

buy request being initiated by the user through a single graphical user interface action by the user once an identifier for the particular media item is displayed on a display screen for the user, and the buy request including an account identifier for the user; initiating payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user; determining media access information pertaining to the particular media item; and sending, over the network, the media access information to a user machine of the user, the media access information thereafter being used by the user machine to access the particular media item.

**[0014]** As a computer readable medium including at least computer program code for purchasing access to a media item over a network, one embodiment of the invention includes at least: computer program code for receiving, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user, the buy request including an identifier for the particular media item and an account identifier for the user; computer program code for initiating payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user; computer program code for determining media access information pertaining to the particular media item; and computer program code for sending, over the network, the media access information to a user machine of the user, the media access information thereafter being used by the user machine to access the particular media item.

**[0015]** As a network-based media purchase system, one embodiment of the invention includes at least: a plurality of client media player programs, each of the client media player programs being resident on a different client machine; a media storage server that stores media items in an encrypted format; and a media commerce server. The media commerce server enables each of the client media player programs to purchase media items by enabling the client media player programs to initiate payment for such, to download the media items that have been purchased, to modify encryption imposed on the media items, to store the media items to the client media, and to subsequently use the stored media items.

**[0016]** As a network-based media purchase system, another embodiment of the invention includes at least: a plurality of client media player programs, each of the client media player programs being resident on a different client machine; a media storage server that stores media items in an encrypted format; and a media commerce server. The media commerce server enables each of the client media player programs to purchase media items by enabling the client media player programs to specify at least one media item to purchase and to initiate payment for the purchase, to encrypt the at least one media item particular for a user account or user associated with the one of the client media player programs, and to download and store the at least one media item that has been encrypted to the client machine operating the one of the client media player programs.

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**[0017]** As a method for processing an electronic payment for an online purchase, one embodiment of the method includes at least the acts of: receiving purchase information for an online purchase made by a user; deferring processing of electronic payment for the online purchase; accumulating the purchase information for the online purchase together with one or more other online purchases of the user being deferred; determining whether a deferral limit for the online purchases of the user being deferred has been reached; and initiating an aggregate electronic payment transaction for the online purchases being deferred after the determining determines that the deferral limit has been reached.

**[0018]** As a computer readable medium including at lest computer program code for processing an electronic payment for an online purchase, one embodiment of the invention includes at least: computer program code for receiving purchase information for an online purchase made by a user; computer program code for deferring processing of electronic payment for the online purchase; computer program code for accumulating the purchase information for the online purchase together with one or more other online purchases of the user being deferred; computer program code for determining whether a deferral limit for the online purchases of the user being deferred has been reached; and computer program code for initiating an aggregate electronic payment transaction for the online purchases being deferred after the determining determines that the deferral limit has been reached.

[0019] Other aspects and advantages of the invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

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#### BRIEF DESCRIPTION OF THE DRAWINGS

**[0020]** The invention will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

[0021] FIG. 1 is a block diagram of a media purchase system according to one embodiment of the invention.

[0022] FIGs. 2A and 2B are flow diagrams of media purchase processing according to one embodiment of the invention.

**[0023]** FIG. 3 is flow diagram of media commerce processing according to one embodiment of the invention.

[0024] FIG. 4 is a flow diagram of transaction completion processing according to one embodiment of the invention.

[0025] FIG. 5A is a flow diagram of payment processing according to one embodiment of the invention.

**[0026]** FIG. 5B is a screen shot of a representative application program window that displays purchase history information corresponding to a user's account.

[0027] FIG. 6 is a flow diagram of media delivery processing according to one embodiment of the invention.

[0028] FIG. 7A is a diagram of an application program window according to one embodiment of the invention.

[0029] FIG. 7B is a screen shot of a representative application program window according to one embodiment of the invention.

[0030] FIG. 8 is a flow diagram of media search processing according to one embodiment of the invention.

[0031] FIG. 9 is a flow diagram of additional processing according to one embodiment of the invention.

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[0032] FIG. 10 is a diagram of an application program window according to one embodiment of the invention.

[0033] FIGs. 11A – 11C are screen shots illustrating successive views of a browse feature according to one embodiment of the invention.

[0034] FIGs. 12A and 12B are flow diagrams of media browse processing according to one embodiment of the invention.

[0035] FIGs. 13A-13B are screen shots illustrating additional features of a graphical user interface according to other embodiments of the invention.

[0036] FIGs. 14A and 14B are screen shots illustrating explicit content notification features according to one embodiment of the invention.

[0037] FIG. 15A is a diagram of an application program window according to one embodiment of the invention.

[0038] FIG. 15B is a diagram of a window according to one embodiment of the invention.

[0039] FIG. 15C is a screen shot of an application program window according to one embodiment of the invention.

[0040] FIG. 16 is a flow diagram of media page processing according to one embodiment of the invention.

#### **DETAILED DESCRIPTION OF THE INVENTION**

[0041] The invention relates to network-based purchase and distribution of media. The purchase and distribution of media are not only secure but also controlled. The security restricts access to media within media files during downloads as well as while stored at a server and/or client. The invention also relates to graphical user interfaces that assist users in locating media to be purchased.

[0042] One aspect of the invention pertains to a system and method for purchasing media items over a network. A potential purchaser can search and

browse through numerous media items on-line that are available for purchase. The potential purchaser can thereafter purchase one or more media items on-line with great ease. Upon purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item is then encrypted for the purchaser's use and stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item).

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**[0043]** Another aspect of the invention pertains to a graphical user interface suitable for reviewing browsing numerous media items. The graphical user interface is also suitable for previewing or purchasing media items in an on-line manner. The graphical user interface is presented to a user at a client (client machine). In one embodiment, the graphical user interface is presented to the user by an application program that runs on the client.

**[0044]** The invention pertains to a method and system for controlled distribution of media in a client-server environment. The controlled distribution uses encryption and user accounts to not only restrict unauthorized access to the media but also to limit usage rights to the media by authorized users. The media can, for example, be audio, video, or image data.

[0045] Embodiments of various aspects of the invention are discussed below with reference to FIGs. 1 - 16. However, those skilled in the art will readily appreciate that the detailed description given herein with respect to these figures is for explanatory purposes as the invention extends beyond these limited embodiments.

**[0046]** One aspect of the invention pertains to a system and method for purchasing media items over a network. A potential purchaser can search and browse through numerous media items that are available for purchase. A potential purchaser can purchase a media item with great ease. Upon purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item is then encrypted for the purchaser's use and stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item). However, the use of the media item can still be limited. For example, only up to a predetermined number user machines can be authorized to use the media item, or only up to a predetermined number of

compact disc copies can be made of a grouping or collection of media items (e.g., a playlist).

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[0047] FIG. 1 is a block diagram of a media purchase system 100 according to one embodiment of the invention. The media purchase system 100 includes a media commerce server 102. The media commerce server 102 coordinates review and/or purchase of media items through on-line transactions. On-line transactions to purchase media items is also referred to as electronic commerce (e-commerce). The media purchase system 100 also includes a client 104. Typically, the media purchase system 100 would include a plurality of different clients 104. Each client 104 includes a media player 108. The media player 108 is an application program (e.g., software application) that operates on the client 104, which is a computing device. The client 104 is coupled to the media commerce server 102 through a data network 106. Hence, any of the clients 104 can interact with the media commerce server 102 to review and/or purchase media items. In one embodiment, the data network 106 includes at least a portion of the Internet. The clients 104 can vary with application but generally are computing devices that have memory storage. Often, the clients 104 are personal computers or other computing devices that are capable of storing and presenting media to their users.

**[0048]** The media purchase system 100 also includes a media storage server 110 and a media store 112. The media storage server 110 represents a remote storage server that couples to the data network 106. The media store 112 provides mass storage of the numerous media items that are available for purchase via the media purchase system 100. Once purchased, the media items can be accessed from the media store 112 over the data network 106 by way of the media storage server 110.

**[0049]** More particularly, the media purchase system 100 allows a user of the client 104 to utilize the media player 108 to browse, search or sort through a plurality of media items that can be purchased from the media commerce server 102. The media player 108 may also allow the user to preview a media clip of the media items. In the event that the user of the media player 108 desires to purchase a particular media item, the user (via the media player 108) and the media commerce server 102 engage in an on-line commerce transaction in which the user pays for access rights

to the particular media item. In one embodiment, a credit card associated with the user is credited for the purchase amount of the particular media item.

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[0050] In the media purchase system 100 shown in FIG. 1, the media items are stored in the media store 112 and retrieved via the media storage server 110. Hence, the media commerce server 102 need not burden its resources to deliver any of the media items that may be purchased to the client 104. Instead, on purchasing a particular media item, the media commerce server 102 sends download information to the media player 108 on the client 104. The download information can then be used by the media player 108 (and the client 104) to retrieve the media content for the particular media item by interacting with the media storage server 110 through the data network 106. In this regard, the media storage server 110 obtains the media content corresponding to the particular media item from the media store 112 and downloads such content through the data network 106 to the client 104. The downloaded media content can then be stored on the client 104. In one embodiment, the downloaded media content is stored on the client 104 as received. In another embodiment, the downloaded media content is transcrypted from one encryption key to another encryption key before persistent storage on the client 104. In still another embodiment, the downloaded media content is encrypted as received at the client 104 but is decrypted and then re-encrypted before persistent storage on the client 104. Thereafter, the media player 108 can present (e.g., play) the media content at the client 104.

[0051] The connections through the data network 106 between the media commerce server 102, the client 104 and the media storage server 110 can be through secure connections, such as Secure Sockets Layer (SSL). Further, the media content is stored at the client 104 in an encrypted manner.

**[0052]** As discussed in greater detail below, the media player 108 can utilize an improved graphical user interface. More particularly, in one embodiment, a window presented on a display device of the client 104, when executing the media player 108, includes an upper window that displays content provided by the media commerce server 102 in a browser-like manner, and a lower window displays content provided by the media commerce server 102 in a typical media player-like manner. In another embodiment, a window presented on a display device of the client 104, when executing the media player 108, includes an upper window that displays presented on a display device of the client 104, when executing the media player 108, includes an upper window that

Att. Dkt. No.: APL1P270X1/P3059X1 Page 10

displays a multi-tier browse interface that implements a browse function with respect to the media items through interaction with the media commerce server 102.

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[0053] FIGs. 2A and 2B are flow diagrams of media purchase processing 200 according to one embodiment of the invention. The media purchase processing 200 is, for example, processing associated with a media player of a media purchase system. The media player can, for example, be the media player 108 operating on the client 104 illustrated in FIG. 1.

[0054] The media purchase processing 200 initially permits a user to browse 202 available media items. Typically, the media purchase system supports the purchase of a large number of media items. Hence, the ability to browse, sort and search the available media items is beneficial.

[0055] Next, a decision 204 determines whether a buy selection has been made. Here, in one embodiment, the buy selection is a single user interface action, such as one click of a button. The buy selection is with respect to a selected media item. The buy selection means that the user desires to purchase the selected media item. When the decision 204 determines that the buy selection has not yet been received, then the processing returns to repeat the operation 202 and subsequent operations. Once the decision 204 determines that a buy selection has been made, a decision 206 determines whether a buy warning is enabled. When the decision 206 determines that a buy warning is enabled. When the decision 206 determines that a buy warning is enabled, then a warning dialog is displayed 208 to the user of the media player. The warning dialog serves to warn the user that the buy transaction will be performed unless now canceled.

**[0056]** Following the operation 208, as well as directly following the decision 206 when the buy warning is not enabled, a buy request is prepared and sent 210 to a media server (e.g., the media commerce server 102) of the media purchase system. After the buy request has been prepared and sent 210, a decision 212 determines whether a response has been received. When the decision 212 determines that a response has not yet been received, a decision 214 determines whether an authentication request is instead received. When the decision 214 determines that an authentication request is not received, then the media purchase processing 200 returns to repeat the decision 212 and subsequent operations. On the other hand, when the decision 214 determines that an authentication 214 determines that an authentication 214 determines that an authentication 214 determines 210 media purchase processing 200 returns to repeat the decision 212 and subsequent operations.

performed, then authorization information is entered 216. Here, the authorization information can be provided or entered 216 by the user associated with the media player. Subsequently, the authentication information that has been entered 216 is sent 218 to the media server.

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[0057] Following the operation 218, a decision 220 determines whether the authentication has been successful. When the decision 220 determines that authentication has been successful, then the media purchase processing 200 returns to repeat the decision 212 and subsequent operations. On the other hand, when the decision 220 determines that authentication has been unsuccessful, the media purchase processing 200 is complete and ends.

[0058] Alternatively, when the decision 212 determines that a response to the buy request has been received, media access information is obtained 222. The response to the buy request includes at least the media access information. According to one embodiment, the media access information informs the media player as to where to locate the appropriate media file that has been purchased as well as a download key and a security token. The download key is later used in decrypting the media file. The security token is used in verifying that the right to download the media file has been purchased. In one embodiment, the location of the appropriate media file resides on a media storage server, such as the media storage server 110. Typically, the media storage server is a centralized repository for media files. After the media access information has been obtained 222, an access request for the appropriate media file is prepared and sent 224. The access request is a request to the media storage server that stores the appropriate media file. In one example, the location of the appropriate media file can be designated by a Universal Resource Locator (URL).

**[0059]** Next, a decision 226 determines whether a response has been received. Here, the response, if received, pertains to the access request that was prepared and sent 224. When the decision 226 determines that a response to the access request has not yet been received, the media purchase processing 200 awaits such a response. Next, a decision 228 determines whether the user is authorized. Here, the response will either indicate that the request failed due to a lack of authorization or has succeed and provides (e.g., downloads) the requested media file. When the decision 228 determines that the received response indicates failed authorization,

then an unauthorized message is displayed 230 indicating that access to the requested media file is denied. Following the operation 230, when the user is not authorized, the media purchase processing 200 is complete and ends.

[0060] On the other hand, when the decision 228 determines that the user is authorized to receive the response, the encrypted media file for the selected media item is received 232. The encrypted media file can be received as part of the response or following the response. Then, the encrypted media item can be stored 234 to the client storage, and a complete notification can be sent 236. The complete notification can be sent 236 before or after the storage 234. At this point, the user of the client can thereafter present (e.g., play) the media content within the encrypted media item from the client storage after first decrypting the same using an appropriate key. The appropriate key is, for example, a user key that is associated with a user's account with the media purchase system 100. Optionally, after the encrypted media item is received 232 and before its storage to the client storage, the encryption imposed on the media item can be altered, such as by transcryption from one encryption key (e.g., download key) to another encryption key (e.g., user key) or by decryption from one encryption key (e.g., download key) followed by re-encrypted with another encryption key (e.g., user key).

[0061] FIG. 3 is flow diagram of media commerce processing 300 according to one embodiment of the invention. The media commerce processing 300 is, for example, performed by a media commerce server, such as the media commerce server 102 illustrated in FIG. 1.

**[0062]** The media commerce processing 300 begins with a decision 302 that determines whether a buy request has been received. When the decision 302 determines that a buy request has not yet been received, the media commerce processing 300 awaits such a request. On the other hand, when the decision 302 determines that a buy request has been received, the media commerce processing proceeds to process the buy request. In this regard, an account identifier is identified 304 from the buy request. Here, the buy request is sent by a client to the media commerce server on behalf of a user of the client (namely, user of a media player operating on the client). In one embodiment, the buy request that is sent to the media commerce server includes not only an account identifier for the user of the client but also at least one media item identifier, media price, and a password token.

The password token is random value (e.g., 128 bit string) that is different for every user. The media storage server provides the password token to the client as a result of successful authentication of the user. When the buy request includes a valid password token, the media commerce server can deem the client as properly authenticated.

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[0063] Next, a decision 306 determines whether authentication is required prior to purchase of the media items. When the decision 306 determines that authentication is required, additional processing can be performed to determine whether such authentication exists. In one embodiment, the user's account or client can configure whether such authentication is required or can be overridden by the user. In one embodiment, the authentication is provided to help protect the user of the client (e.g., media player) from other unauthorized users who might access the media commerce server from the client after the user has successfully been authenticated to the media commerce server. The re-authentication is thus used to confirm that the particular user of the client (e.g., media player) is indeed the authorized user for such a system. In this regard, authentication is requested 308. Then a decision 310 determines whether an authentication response has been received. Once the decision 310 receives the authentication response, a decision 312 determines whether the authentication response is able to successfully authenticate the user. When the decision 312 determines that authentication has not been successful, a message indicating that an unauthorized user cannot buy media items is sent 314 to the client for display to the user.

**[0064]** On the other hand, when the decision 312 determines that authentication has been successful, then additional processing is performed to facilitate the purchase of the selected media item identified in the buy request. In this regard, payment for the selected media item is initiated 316. Here, according to one embodiment, the payment can be made by a credit card, and the initiation of such payment can verify the credit card's existence, but may or may not seek to post the charge at this time. As discussed in more detail below, it may be more efficient and desirable to defer the actual posting of the credit to the credit card until a later time. Nevertheless, after the payment for the selected media item has been initiated 316, media access information is obtained 318. The media access information is information that will enable the client (e.g., media player) to retrieve and then access

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the media content for the selected media item. The media access information, in one embodiment, includes a URL, a download key, and a security token. Next, the media access information is sent 320. Here, the media access information is sent from the media commerce server to the client, namely, the media player operating on the client. Then, the transaction associated with the purchase of the selected media item is marked 322 and remembered as being "open." At this point, the transaction is not fully completed because the media content for the selected media item has not yet been received by the client. Following the operations 314 and 322, the media commerce processing 300 is complete and ends.

[0065] FIG. 4 is a flow diagram of transaction completion processing 400 according to one embodiment of the invention. The transaction completion processing 400 begins with a decision 402. The decision 402 determines whether a complete notification has been received. Here, a complete notification is a notification provided by a client to the media commerce server that indicates that a previously "open" transaction is now complete. Once the decision 402 determines that a complete notification has been received, the corresponding "open" transaction is identified 404. Then, the identified "open" transaction is closed 406. Once the identified "open" transaction is closed 406, the client is no longer able to download the media content for a purchased media item from a media storage server (FIG. 6). In other words, the transaction is "closed" only after the client has confirmed receipt of the entire media content for the selected media item. By this approach, the client, after having paid for a particular media item, is guaranteed to receive a full copy of the media content even in the event the download process gets interrupted or dropped several times before it is successfully completed.

[0066] Another aspect of the invention pertains to processing of online payment for one or more media items being purchased.

**[0067]** FIG. 5A is a flow diagram of payment processing 500 according to one embodiment of the invention. The payment processing 500 is, for example, performed by a server. The server can be a media commerce server, such as the media commerce server 102 illustrated in FIG. 1. In one embodiment, the payment processing 500 is invoked by block 316 illustrated in FIG. 3 which initiates payment for a selected media item that is being purchased. However, the payment

processing 500 can also be periodically invoked or invoked on event. The payment processing 500 can also be implemented by one or a plurality of processes.

**[0068]** The payment processing 500 begins with a decision 502 that determines whether there is an open purchase container. Here, a purchase container is a file, folder or other data storage means that provides a temporary holding area for purchases being made with respect to media items. A purchase container can hold information for a number of different purchases for media items. When the decision 502 determines that there is no open purchase container, then a purchase container is opened 504. Then, following the block 504 directly or following the decision 502 when there is already an open purchase container. Here, the purchase container is particular to the user or the user account. At a minimum, for the selected media item, the media purchase container would contain at least a price and a text descriptor for the selected media item. Alternatively, the purchase container could contain a link or reference to such information.

**[0069]** Next, a decision 508 determines whether a purchase deferral limit has been reached. According to the payment processing 500, individual purchases are deferred until the purchase deferral limit has been reached. The purchase deferral limit serves to batch up one or more individual media item purchases for consolidated or block processing. One advantage of the purchase deferral limit is that transaction costs associated with electronic payment systems are reduced. The purchase deferral limits can vary depending upon implementation. As one example, a purchase deferral limit can be based on the number of purchased media items that are in the purchase container. Another example of a purchase deferral limit is time-based, for example, the duration of time since the purchase container was first opened. As another example, the purchase deferral limit can be based upon the aggregate cost of the media items being purchased.

[0070] As a more specific example, the purchase deferral limit might use a combination of dollar amount or time limit, whichever occurs first. For example, the dollar amount could be ten US dollars (\$10.00), and the time limit could be one day. Then, once the media items within the purchase container have a purchase price that exceeds ten dollars, the payment processing 500 would continue so as to obtain electronic payment for such media items within the purchase container. Also, should

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the time limit of one day be reached before the dollar limit is reached, then the payment processing 500 would also continue so as to obtain electronic payment for such media items within the purchase container even though the dollar limit was not met.

[0071] In any case, when the decision 508 determines that the purchase dollar limit has been reached, then the purchase container is closed 510. Then, the payment processing 500 causes 512 a payment transaction to occur for the combined purchase. In other words, if twelve media items at one dollar cost each were contained within the purchase container, then the payment transaction would cause 512 the total amount of twelve dollars (plus any tax or service charge) to be credited to the electronic payment means associated with the user account of the purchaser. An electronic payment system associated with the electronic payment means would then process the payment transaction and charge the user for the media items being purchased. Given that the media items can be accumulated and processed as a batch in this manner, the ability to reduce transaction costs is achieved. Alternatively, when the decision 508 determines that the purchase deferral limit has not yet been reached, then the operations 510 and 512 are bypassed. Following the operation 512, or its deferral, the payment processing 500 is complete until again invoked.

**[0072]** As an optional feature, the payment processing 500 could be customized on a user (e.g., user account) basis. For example, those users that are deemed "good" users or "credit-worthy" users can be given higher purchase deferral limits than other users. The advantage of increased purchase deferral limits is further reduction in transaction costs by additional batching. As one example, a user can be deemed a "good" user if they are a frequent user, such as having already purchased fifty or more media items.

**[0073]** Another aspect of the invention is that a graphical user interface can allow users to access account information. By accessing account information, a user is able to view their current account information and make changes thereto. The account information can include a purchase history for the account. The purchase history can provide the user with a list or report of those media items that have been previously purchased using the user's account. FIG. 5B is a screen shot of a representative application program window 550 that displays purchase history

information corresponding to a user's account. As shown in FIG. 5B, the purchase history can include information on the latest purchase, and can include information pertaining to each of the media items purchased. For example, as shown in FIG. 5B, a table of the purchased media items is provided, with the table providing the information on item, artist, type, when downloaded, and price.

[0074] FIG. 6 is a flow diagram of media delivery processing 600 according to one embodiment of the invention. The media delivery processing 600 is, for example, performed by the media storage server 110 illustrated in FIG. 1.

[0075] The media delivery processing 600 begins with a decision 602. The decision 602 determines whether an access request has been received. An access request is a request from a client to obtain the media content for one or more media items that are stored in a media store (e.g., media store 112) associated with the media storage server (e.g., media storage server 110). In one embodiment, the access request includes at least a URL for the selected media item and a security token from the client. When the decision 602 determines that an access request has been received, then the media delivery processing 600 is effectively invoked. In other words, once an access request has been received, the access request is authenticated 604. The authentication 604 involves the analysis of at least a portion of the access request to authenticate that the request is legitimate and from one that was authorized by the media commerce server. In one embodiment, a hash algorithm can be applied to the URL, a name of the media commerce server, a time of purchase. The result of the hash algorithm is then compared with the security token which is the product of a complimentary hash algorithm performed at the media commerce server. A decision 606 then determines whether the authentication was successful. Here, in one embodiment, if the hashing algorithm approach is used, the result of the hash algorithm should match the security token within some tolerance set by a time limitation. For example, the tolerance due to time might permit the access request to remain authenticate for forty-eight (48) hours after purchase.

[0076] When the decision 606 determines that the authentication was not successful, then an access denied indication is returned 608. Here, the access request is denied and the client is so notified. On the other hand, when the decision 606 determines that the authentication was successful, then an encrypted version of

the selected media item that has been purchased is retrieved 610. Here, the media storage server would retrieve the encrypted version of the selected media item from the media store. Then, the encrypted version of the selected media item is sent 612 to the requestor (client). In other words, the encrypted version of the selected media item. Following the operations 608 and 612, the media delivery processing 600 is complete and ends.

[0077] Another aspect of the invention pertains to a graphical user interface suitable for reviewing numerous media items. The graphical user interface is also suitable for previewing or purchasing media items in an on-line manner. The graphical user interface is presented to a user at a client (client machine). In one embodiment, the graphical user interface is presented to the user by an application program that runs on the client, such application program being referred to as a media player (see FIG. 1).

FIG. 7A is a diagram of an application program window 700 according to [0078] one embodiment of the invention. The application program window 700 includes a first sub-window 702 and a second sub-window 704. The first sub-window 702 presents information in a browser-like manner, while the second sub-window presents information in an application-like manner. In other words, the application program that is producing the application program window 700 can operate in a local mode manner in which case the content displayed in the application program window 700 would not include the first sub-window 702. However, in a remote mode, when the application program is interacting with a remote server, the application program window 700 can include the first sub-window 702 and the second sub-window 704 as shown in FIG. 7. In such an environment, the first sub-window 702 displays content provided by the remote server in a browser-like manner. This gives the user the feeling of interacting with the remote server in a browser-like style. However, in the second sub-window 704, the user of the application still retains the interface and thus the feel of interacting with the application program as it would as if the application was operating locally (local mode) instead of through interaction with the remote server. However, even in this case, the content for the second sub-window 704 can be retrieved from the remote server.

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[0079] FIG. 7B is a screen shot of a representative application program window 720 according to one embodiment of the invention. The application program window 720 includes a first sub-window 722 and a second sub-window 724 which correlate to the first sub-window 702 and the second sub-window 704 of the application program window 700 shown in FIG. 7A. Additionally, the application program window 720 includes a source window 726. The source window 726 is shown listing a variety of different sources for media content. As shown in FIG. 7B, the source window 726 shows the source being a music store, as shown by highlight bar 727. The music store, in this embodiment, represents a remote media server that contains media (e.g., music) that can be purchased by a user of the application program. Hence, as shown in FIG. 7B, a user has performed a search 728 for music available on the music store by the artist that includes the term "Reba". The results for the search 728 are the content that is provided by the remote media server to the application program. Such content is used to populate the region of the first subwindow 722 and the second sub-window 724. As shown in FIG. 7B, the first subwindow 722 includes three regions, namely, a Top Albums region 722-1, a Top Songs region 722-2, and a Top Artists Region 722-3. The Top Albums region 722-1 references only a single album and thus depicts the album cover art 730 for that album as well as a "buy album" button 732. A user is able to purchase the album indicated in the Top Albums region 722-1 by selecting the corresponding "buy album" button 732. Typically, if the user's account has been so configured, the user can buy the album by the single graphical user interface action of "clicking" on the "buy album" button 732. The Top Songs region 722-2 lists the top songs associated with the artist(s) or album(s) of the Top Albums region 722-1, and the Top Artists region 722-3 indicates the top artist(s) or album(s) associated with the Top Albums region 722-1.

**[0080]** In the second sub-window 724, a list of media items associated with the one or more albums identified by the Top Albums region 722-1 are displayed. In one embodiment, the media items are displayed in a list-like manner that can resemble or mimic the technique utilized to present a list of media items to the user by the application program in cases where the media source is local to the client (i.e., the media items are stored locally). Hence, although the media items specified within the second sub-window 724 are provided by the remote media server, they are

presented in a manner that is sophisticated and frequently utilized by the application program in other situations. As shown in FIG. 7B, a particular one of the media items within the list of media items has been selected as shown by a highlight bar 734. Further, any of the media items listed in the second sub-window 724 can be purchased by selection of the associated "buy song" button 736. Again, through a single graphical user interface action, such as "clicking" on the associated "buy song" button 736, the associated media item can be purchased. Further, as shown in FIG. 7B, for a given media item being displayed in the second sub-window 724, characteristic information about the media item can be presented in a column-like fashion. The characteristic information, for example, includes song name, duration of song (time), artist, album, genre, relevance indication, and price.

[0081] Still further, the application program window 720 can display other controls or information. For example, the application program window 720 can display a play control 738. Upon selection of the play control 738, a preview audio clip pertaining to a selected one of the media items from the second sub-window 724 is played. Similarly, by "double clicking" on a particular media item in the second sub-window 724, the associated preview audio clip can also be played. Hence, users deciding which media items to purchase are able to easily obtain and hear a preview audio clip. The application program window 720 can also include a browse control 740. Upon selection of the browse control 740, a browse process is performed. The browse process is another way (besides the search process) to identify media items of interest to the user. A search box 742 can also be provided within the application program window 720 to enable a user to perform a further search. Still further, an account area indication 744 provides an indication of whether a user account is active. For example, as shown in FIG. 7B, when an account identifier (such as an email address) for an authorized user is displayed in the account identifier region 744, the application program recognizes that the associated user of the account is logged on (signed in) and their account is active such that the user is able to purchase desired media content from the media store.

[0082] FIG. 8 is a flow diagram of media search processing 800 according to one embodiment of the invention. The media search processing 800 is, for example, performed by an application program operating on a client. The application program is, for example, the media player 108 illustrated in FIG. 1.

[0083] The media search processing 800 is activated once a user of the application program desires to perform a search in order to identify media content of interest to the user. Hence, a search dialog box is initially displayed 802 to the user. In this embodiment, we assume that the user desires to perform a sophisticated search using field-base restrictions. However, if the user just wants to perform a simple search using merely a term, then the search box 742 shown in FIG. 7B could be utilized. In any case, search criteria is entered 804. Then, a decision 806 determines whether a search is to be performed. When the decision 806 determines that a search is not to be performed, the media search processing 800 returns to repeat the operation 804 and subsequent operations so that the search criteria can be changed. However, once the decision 806 determines that a search is to be performed, then a search request is sent 808 to a remote media server. Here, in one example, the remote media server is the media commerce server 102 illustrated in FIG. 1. The search request is a request to the remote media server to perform a search in accordance with the search criteria. Here, the remote media server includes at least information (e.g., metadata) for a large number of media items that are available to be purchased from the remote media server, though the content of the media items that are purchased may be acquired at the client via download with respect to another remote server, such as the media storage server 110.

**[0084]** After the search request has been sent 808 to the remote media server, a decision 810 determines whether a response has been received. Here, the media search processing 800 waits until a response to the search request has been received back at the application program. Once the decision 810 determines that a response has been received, an application program window is produced or rendered by the application program. More specifically, a first window (e.g., first subwindow) of the application program window is rendered 812 with album related information. Additionally, a second window (e.g., second sub-window) of the application program window (e.g., second sub-window) of the application program window is rendered 814 so as to display media item information corresponding to the album related information. In one embodiment, the media item information can be displayed in the second window in a list format or in a row and column format.

[0085] For example, the search criteria of "Reba" and such was sent to the remote media server. The remote media server returned the album related

information that is depicted in the first sub-window 722 illustrated in FIG. 7B, and the corresponding media item information depicted in the second sub-window 724 shown in FIG. 7B.

[0086] In one embodiment, the response from the remote media server is a list media items (e.g., tracks) that result from a search request. The second window displays media item information for the media items (e.g., tracks) on the list of media items. The first window can display album related information for the most relevant media items (e.g., tracks) on the list of media items.

**[0087]** At this point, the media search processing 800 has received search criteria and performed a search at a media server, and then returned results that are displayed in the first window and the second window. At this point, and using graphical user interface components that are also provided within the first window and the second window, the user of the application program is able to further interact with the graphical user interface to perform other operations from the results view such as shown in FIG. 7B.

**[0088]** FIG. 9 is a flow diagram of additional processing 900 according to one embodiment of the invention. The additional processing 900 is processing that can be invoked and performed by the application program following either the media search processing shown in FIG. 8 or the media browse processing discussed below with reference to FIGs. 12A and 12B.

[0089] As shown in FIG. 9, a decision 902 determines whether a buy selection has been made. For example, with respect to FIG. 7B, whether the user selected a "buy album" button 732 or a "buy song" button 736. When the decision 902 determines that a buy selection has been made, then media purchase processing 904 is performed. As an example, the media purchase processing 904 can be the media purchase processing 200 shown in FIGs. 2A and 2B. Alternatively, when the decision 902 determines that a buy selection has not been made, then a decision 906 determines whether a preview selection has been made. For example, as noted above with respect to FIG. 7B, a preview can be selected through use of a preview control 738 or by "double-clicking" on a particular media item listed within the second sub-window 724. In any case, when the decision 906 determines that a preview stream for the selected media item is

requested 908 from the remote media server. Here, the application program does not locally store the media content needed to preview media items. Hence, to preview a particular media item, the application program sends a preview request to the remote media server to instruct the media server to stream the preview for the selected media item to the particular application program. Once the stream for the preview request has been initiated by the remote media server, the preview stream is played 901 at the application program, thereby permitting the user of the application program to hear the audio associated with the preview clip for the selected media item.

[0090] On the other hand, when the decision 906 determines that a preview selection has not been made, then a decision 912 determines whether any of a variety of other selections have been made. The user is able to interact with an application program window in a variety of different ways beyond search, buy and preview. For example, the user could interact with the graphical user interface to sort the media items in the second sub-window 724 in a different manner, or might request a browse operation using the browse control 740, might proceed to a home page for the music store, etc. These other types of processing can be performed at 914 when one or more such other selections are determined by the decision 912 to have been made. If the decision 912 determines that there are no other selections, then the media search processing 900 can return to repeat the decision 902 and subsequent operations so that these additional operations or functionality that can be utilized from the application program window are available. Following the operations 904, 910 and 914, the media search processing 900 is complete and ends.

**[0091]** Still another aspect of the invention pertains to a graphical user interface suitable for efficiently browsing through numerous media items. The graphical user interface is also suitable for purchasing media items in an on-line manner. The graphical user interface is presented to a user at a client (client machine). In one embodiment, the graphical user interface is presented to the user by an application program that runs on the client, such application program being referred to as a media player (see FIG. 1).

[0092] FIG. 10 is a diagram of an application program window 1000 according to one embodiment of the invention. The application program window 1000 is a graphical user interface. A user can interact with the graphical user interface to

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browse media items that are available on a remote server for purchase or preview. The remote server can, for example, include one or both of the media commerce server 102 and the media storage server 110 shown in FIG. 1.

[0093] The application program window 1000 includes a first sub-window 1002 and a second sub-window 1004. The first sub-window 1002 includes a first region 1002-1, a second region 1002-2, and a third region 1002-3. As shown in FIG. 10, the first region 1002-1 includes a first list 1006 of items. A user would interact with the first region 1002-1 to select one of the items in the first list 1006 of items. The selected item can then be highlighted 1008 (or otherwise visually distinguished). Once a particular item within the first list 1006 is selected and thus highlighted 1008, a request is sent to the remote server to identify the appropriate items for a second list 1010 of items that are displayed in the second region 1002-2. In other words, the remote server responds to the request with the items for the second list 1010 that are to be displayed within the second region 1002-2. Again, a user can interact with the second region 1002-2 to select one of the items within the second list 1010. The selected item can then be highlighted 1012 (or otherwise visually distinguished). Then, the selected and highlighted item 1012 causes a request to be sent to the remote server to obtain items that are associated with the selected and highlighted item 1012. The response from the remote server is one or more items that are displayed in a third list 1014 within the third region 1002-3. A user can interact with the third region 1002-3 to select one of the items within the third list 1014. The selected item can then be highlighted 1016 (or otherwise visually distinguished).

[0094] After one of the items within the third list 1014 has been selected and highlighted 1016, still another request can be sent to the remote server to obtain items that are associated with the selected and highlighted item 1016. In response to the request, the remote server supplies one or more items that are displayed in the second sub-window 1004. These items can be displayed in a variety of different ways and generally also include descriptive or characteristic information for each of the items. The one or more items can be displayed as a list or as a row and column (e.g., table) format. In one embodiment, the second sub-window 1004 is larger than each of the regions of the first sub-window 1002, and thus the second sub-window 1004 has additional display area for information pertaining to each of the media items being displayed therein. In one embodiment, the items being displayed in the

second sub-window 1004 are media items. These media items can, for example, be songs, videos or images that can be previewed or purchased.

[0095] FIGs. 11A-11C are screen shots illustrating successive views of a browse feature according to one embodiment of the invention.

**[0096]** FIG. 11A is a screen shot of an application program window 1100 according to one embodiment of the invention. The application program window 1100 includes a first sub-window 1102, a second sub-window 1104, and a third sub-window 1106. The first sub-window 1102 includes a first region 1102-1, a second region 1102-2 and a third region 1102-3. As shown in FIG. 11A, the first region 1102-1 is shown displaying a list of available genre (genre list) 1108. The second area 1102-2 displays the text "select genre" which is intended to inform the user to select one of the items within the genre list 1108 being displayed in the first region 1102-1.

**[0097]** FIG. 11B is a screen shot of an application program window 1120 after a user has selected one of the items within the genre list 1108 being displayed in the first region 1102-1. A selected item 1122 from the genre list 1108 can be highlighted as shown in FIG. 11B. Once a user has selected one of the items within the list 1108 (selected genre), the second region 1102-2 can be populated with a list of artists (artist list) 1124 that are associated with the selected genre from the genre list 1108. The artist list 1124 is provided by the remote server to the application program that presents the application program window 1120. The third region 1102-3 displays the message "select artist" to encourage the user to select one of the artists from the artist list 1124 being displayed in the second region 1102-2.

**[0098]** FIG. 11C is a screen shot of an application program window 1140 after the user has selected one of the available artists from the artist list 1124 of the second region 1102-2. When a user has selected one of the artists (selected artist) 1144 from the artist list 1124 of the second region 1102-2, the selected artist 1144 can be illustrated in a highlighted manner. Then, the third region 1102-3 displays one or more albums in an album list 1146. The albums within the album list 1146 are those albums that are the product of the selected artist 1144. The album list 1146 is provided by the remote server. When the album list 1146 has a plurality of items, the user would select one of the items. However, as shown in FIG. 11C, the

album list 1146 has but a single item (album). Hence, the single item is deemed selected. Once an item in the album list 1146 is selected, the second sub-window 1104 can be populated with a music list 1148 of the songs that are on the selected album. The music list 1148 can display descriptive information for each of the songs. For example, as shown in FIG. 11C, the song list 1148 is presented in a row and column (e.g., table) format with each row pertaining to a different song on the selected album, and with the columns pertaining to song name, title, artist, album, genre, and price. Further, within the price column, each of the rows can include a "buy song" button 1150 that allows for ease of purchase of the particular song by the user. In one embodiment, the price is a fixed price per song/track. For example, the fixed price could be \$0.99 per song.

[0099] FIGs. 12A and 12B are flow diagrams of media browse processing 1200 according to one embodiment of the invention. The media browse processing 1200 is, for example, performed by a media player, such as the media player 108 operating on the client 104 illustrated in FIG. 1. The media player also communicates with a remote server (media server) to obtain information pertaining to available media content that can be viewed, presented, previewed or purchased. The remote server can, for example, include one or both of the media commerce server 102 and the media storage server 110 shown in FIG. 1.

[00100] The media browse processing 1200 initially displays 1201 a browse window with a list of selectable genre. The genre within the list is provided by the remote server to the application program that produces the browse window. As an example, the browse window can pertain to the application program window 1000, 1100, 1120 or 1140 shown in FIGs. 10 and 11A - 11C.

[00101] Next, a decision 1202 determines whether a genre selection has been made. When the decision 1202 determines that a genre selection has not yet been made, the media browse processing 1200 awaits for the user to make such a selection. Once the decision 1202 determines that a genre selection has been made, then the selected genre is highlighted 1204. In addition, those available artists within the selected genre are requested 1206 from the remote server.

[00102] A decision 1208 then determines whether a response has been received from the remote server. When the decision 1208 determines that a response has

not yet been received, the media browse processing 1200 awaits such a response. Once the decision 1208 determines that a response has been received, a list of selectable artists that are within the selected genre is displayed 1210. In other words, the response from the remote server identifies those selectable artists that are within the selected genre. The selectable artists are then displayed 1210 in the list of selectable artists. In one embodiment, while displaying the list of selectable artists, the list of selectable genre is also still displayed.

[00103] After the list of selectable artists is displayed 1210, a decision 1212 determines whether an artist selection has been made. Here, the user is able to interact with the browse window to select an artist from the list of selectable artists that is being displayed 1210. When the decision 1212 determines that an artist selection has not been made, the media browse processing 1200 awaits such a selection. Once the decision 1212 determines that an artist selection has been made, the selected artist is highlighted 1214. Then, available albums for the selected artist are requested 1216 from the remote server (media server). A decision 1218 then determines whether a response to the request has been received from the remote server. When the decision 1218 determines that a response has not yet been received, the media browse processing 1200 awaits such a response. Once the decision 1218 determines that a response has been received, a list of selectable albums for the selected artist is displayed 1220. The response from the media server in this case includes the selectable albums that were produced by the selected artist. In one embodiment, the list of selectable albums can be displayed 1220 while the list of selectable artists and the list of selectable genre are also concurrently being displayed.

**[00104]** After the list of selectable albums is displayed 1220, a decision 1222 determines whether an album selection has been made. When the decision 1222 determines that an album selection has not yet been made, the media browse processing 1200 awaits such a selection. When the decision 1222 determines that an album selection has been made, then media items that are on the selected album are requested 1224 from the media server. A decision 1226 then determines whether a response to the request has been received. When the decision 1226 determines that a response has not yet been received, then the media browse processing 1200 awaits such a response. When the decision 1226 determines that

a response has been received, then a media item window is displayed 1228 having media item information corresponding to the selected album. Typically, the media item window would display a list of media items that correspond to the selected album. For example, the media items could be songs that are present on the selected album. For example, as shown in FIG. 11C, the second sub-window 1104 can pertain to the media item window and display a list of media items (songs) together with other descriptive or characteristic information pertaining to the media items.

**[00105]** Following the operation 1228, the user can interact with the media item window to preview, sort, and purchase any of the media items. Such additional operations can be performed, in one embodiment, as shown in FIG. 9 discussed above.

[00106] Furthermore, the graphical user interface discussed above with respect to FIGs. 10 – 12B was primarily discussed in terms of musical songs. However, as previously noted, the graphical user interface is generally applicable to browsing media items. For example, the media items can be video (e.g., DVDs), audio books or a grouping (e.g., charts). For example, in the case of audio books, the graphical user interface might permit the user to first select "Audio books," then select a category, and then select an author. Once an author is selected, a list of available audio books could be displayed in another window, from which the user could preview and/or buy any of the listed audio books. For example, with respect to the application program window 1000 shown in FIG. 10, in one embodiment, the first region 1002-1 can display a list of genre in which "audio books" is included as one genre, the second region 1002-2 can display a list of categories of audio books (arts & entertainment, sports, history, etc.), and the third region 1002-3 can list the authors of having audio books in the selected category.

[00107] As another example, when the media items pertain to a grouping, the graphical user interface can enable a user to browse the groupings. In one implementation, the groupings can pertain to charts. For example, the graphical user interface might permit the user to first select "charts," then select a particular chart, and then select a particular year for that chart. Once a year is selected, a list of media items (e.g., songs) associated with the particular chart for the particular year can be displayed in another window, from which the user could preview and/or

buy any of the listed media items. For example, with respect to the application program window 1000 shown in FIG. 10, in one embodiment, the first region 1002-1 can display a list of genre in which "charts" is included as one genre, the second region 1002-2 can display a list of charts (e.g., Billboard Hot 100, Rick Dees Weekly Top 40 Chart, etc.), and the third region 1002-3 can list the years for the selected chart.

[00108] One genre of music is "classical." The graphical user interface discussed above with respect to FIGs. 10 - 12B can also be used to browse classical music. For example, with respect to the application program window 1000 shown in FIG. 10, in one embodiment, the first region 1002-1 can display a list of genre in which "classical" is included as one genre, the second region 1002-2 can display a list of artists of classical music (e.g., Mozart, Beethoven, etc.), and the third region 1002-3 can list the albums (CDs) of the selected artist. The one or more items that are displayed in the second sub-window 1004 can be individual media items (e.g., tracks) or a grouping of media items (e.g., a group of tracks). For example, a media item "Piano Concerto No. 19" can be displayed in a row within the second sub-window 1004. However, such a media item can represent a grouping of different movements, tempos, arrangements, etc., such as "Piano Concerto No. 19 In F, KV 459: Allegro Vivace," "Piano Concerto No. 19 In F, KV 459: Allegretto," and "Piano Concerto No. 19 In F, KV 459: Allegro Assai." The grouping can be displayed initially in a single row in a condensed fashion. In one embodiment, besides a descriptor for the grouping, an indicator (e.g., symbol or icon) can be displayed at each row in the second sub-window 1004 in which the descriptor represents a grouping. The indicator can also be user-selectable so that the user can cause the single row to expand to a plurality of rows as needed to display information on the individual media items (e.g., tracks) of the grouping. The indicator can thus permit the user to view a grouping of media items in a compressed or an expanded fashion.

**[00109]** FIGs. 13A-13B are screen shots illustrating additional features of a graphical user interface according to other embodiments of the invention. The screen shot shown in FIG. 13A is similar to that shown in FIG. 11C, and can be arrived at by similar processing.

[00110] FIG. 13A is a screen shot of an application program window 1300 according to another embodiment of the invention. The application program window
1300 includes a first sub-window 1302, a second sub-window 1304, and a third subwindow 1306. The first sub-window 1302 includes a first region 1302-1, a second region 1302-2 and a third region 1302-3. As shown in FIG. 13A, the first region 1302-1 is shown displaying a list of available genre (genre list) 1308. After user has selected one of the items within the genre list 1308, the selected item 1310 can be indicated by highlighting such as shown in FIG. 13A. The second area 1302-2 displays a list of artists (artist list) 1312 that are associated with the selected genre from the genre list 1308. Then, after the user has selected one of the available artists from the artist list 1312 of the second region 1302-2, the selected artist 1314 can be illustrated in a highlighted manner. The third region 1302-3 displays one or more albums in an albums list 1316. When the albums list 1316 has a plurality of items, the user would select one of the items. However, as shown in FIG. 13A, the albums list 1316 has but a single item (album). Hence, the single item is deemed selected. Once an item in the album list 1316 is selected, the second sub-window 1304 can be populated with a song list 1318 of the songs that are on the selected album. The song list 1318 can display descriptive information for each of the songs. For example, as shown in FIG. 13A, the song list 1318 is presented in a row and column (e.g., table) format with each row pertaining to a different song on the selected album, and with the columns pertaining to song name, title, artist, album, genre, and price.

**[00111]** At this point, the user has completed the browse operation and can then interact with the application program window 1300 in a variety of different ways. One way that the user can interact with the application program window 1300 is through use of a toggle control 1320. The toggle control 1320 is a button, image or other user interface control that is selectable by a user. The toggle control 1320, when selected, toggles the graphical user interface from the browse interface in the first sub-window 1302 to an informational mode.

[00112] FIG. 13B is a representative application program window 1350 that is displayed after the user interacts with the browse control 1320 shown in FIG. 13A. In such case, the first sub-window 1302 is altered to contain descriptive information for associated media items. In particular, for the example shown in FIG. 13B, the first sub-window 1302 contains an image 1352 associated with a selected album, information 1354 pertaining to the selected album, and a "buy album" button 1356 to

facilitates a user's purchase of access rights to all the songs on the selected album. In this example, the particular selected album "Party Mix/Mesopotamia" by the B-52s was previously selected through a browse operation with respect to FIG. 13A. However, upon the user selecting the toggle control 1320, the graphical user interface alters the first sub-window 1302 to that shown in FIG. 13B. The resulting graphical user interface facilitates the user's review of the album that has been identified by the browse operation. The user can not only directly buy the album through use of the "buy album" button 1356, but can also review the information 1354 and the associated image 1352. In one embodiment, the price is a fixed price per album. For example, the fixed price could be \$9.99 per album. Additionally, the first sub-window 1302 can further include a Top Downloads region 1358 and a Related Items region 1360. The Top Downloads region 1358 can contain a list of the most frequently downloaded songs from the selected album. The Related Items region 1360 can contain a list of other songs that purchasers of the music from the artist of the selected album have also bought.

[00113] In the representative application program window 1350 shown in FIG. 13B, the second sub-window 1304 may or may not change as compared to the second sub-window 1318 shown in FIG. 13A. However, in other embodiments, the second sub-window 1318 can have its displayed list of songs changed or updated, or even be eliminated. Likewise, the third sub-window 1306 is not necessarily always present.

**[00114]** Further, it should be understood that the toggle control 1320 is also provided with the graphical user interface shown in FIG. 13B. Hence, the user can interact with the toggle control 1320 as shown in FIG. 13B to return to the graphical user interface depicted in the application program window 1300 shown in FIG. 13A. Further, a user could have performed a music search to initially produce the application program window 1350 shown in FIG. 13B. Such an approach would be an alternative to the use of the browse process such as depicted in FIG. 13A. In any case, through a search operation, the user can identify or locate a selected album and thus be presented with the graphical user interface shown in the application program window 1350 shown in FIG. 13B. Then, should the user desire to enter a browse mode, the user can select the browse control 1320 shown in FIG. 13B and thus be presented with the graphical user interface provided with the application

program window 1300 shown in FIG. 13A. In other words, the user can use the browse control 1320 to transition between a browse mode and an informational mode.

(001151 Still another feature associated with the invention is illustrated with respect to FIGs. 13A and 13B. The second sub-window 1304 includes "buy song" buttons 1362 and "go to" buttons 1364, 1366 and 1368 for each of the songs listed in the second sub-window 1304. The "go to" buttons 1364, 1366 and 1368 are shown as small buttons with arrows symbols therein. As previously discussed, the "buy song" button 1362 can facilitate a user in easily purchasing access to the associated song. The selection of the "go to" button 1364 causes the first sub-window 1302 to display information pertaining to the associated artist (e.g., The B52s). The selection of the "go to" button 1366 causes the first sub-window 1302 to display information pertaining to the associated selected album. For example, if the user had selected the "go to" button 1366 shown in FIG. 13A, the first sub-window 1302 would then display the album information such as shown in FIG. 13B. If the user selects the "go to" button 1368 of either the application program window 1300 or the application program window 1350, a genre window for would be presented in the first subwindow 1302 (and/or the second sub-window 1304). In this example, the genre window would pertain to the genre of "pop." From the genre window, the user could interact to specify one or more selected genre and then proceed to locate music of interest.

**[00116]** Alternatively, when the media items being browsed as audio books, the "go to" button can cause a book page to be displayed and the buy buttons can indicate "buy book." Given that the audio data to be downloaded in the case of an audio book is sizeable, in one embodiment, the audio data for the audio book can be divided into a plurality of files which are separately downloaded. The audio quality for audio books can also be reduced as compared to musical songs as another means to reduce the amount of audio data required to be downloaded.

[00117] Still another aspect of the invention pertains to informing the users about explicit content that may be present in songs or albums. FIGs. 14A and 14B are screen shots illustrating explicit content notification features according to one embodiment of the invention.

[00118] FIG. 14A is a screen shot of an application program window 1400 according to one embodiment of the invention. The application program window 1400 includes a first sub-window 1402, a second sub-window 1404, and a third subwindow 1406. The first sub-window 1402 includes a Top Albums region 1402-1, a Top Songs region 1402-2, and a Top Artists region 1402-3. The Top Albums region 1402-1 contains those albums that match search criteria. For example, in this example, the search criteria was "trina" and the Top Albums regions 1402-1 depicts four separate albums that were identified by searching the music database with respect to the search criteria "trina". The Top Songs region 1402-2 includes a list of top songs with respect to any of the albums listed in the Top Albums regions 1402-1. The Top Artists region 1402-3 can represent the top artists with respect to the albums within the Top Albums region 1402-1. Alternatively, the Top Songs region 1402-2 in the top artists region 1402-3 could be top songs for the larger categories of genre, time period, or overall. Additionally, the second sub-window 1404 displays those songs that are associated with the albums within the Top Albums region 1402-1. In other words, the songs listed within the second sub-window 1404 are those songs that somehow relate to the search criteria.

**[00119]** It should also be noted that the application program window 1400 further includes explicit content indicators 1408 and clean content indicators 1410. In this regard, it is known that songs or albums can contain offensive language (e.g., expletives or other foul language) that is not appropriate for all audiences. Hence, albums or songs can be indicated as containing such explicit content through use of the explicit content indicator 1408. As shown in FIG. 14A, the explicit content indicator 1408 can be associated with an album, such as shown in the first subwindow 1402, and/or can be associated with individual songs, such as shown in the second sub-window 1404.

[00120] Further, in the case in which an album or song has explicit content, another version of the same album or song can be provided and thus made available for purchase with modifications to remove the explicit and potentially offending material. These types of songs or albums are indicated by the clean content indicator 1410.

[00121] If desired, a user can select one of the albums within the Top Albums region 1402-1 or through selection of one of the "go to" buttons 1414 for album

information within the second sub-window 1404. If the user does select either the image 1412 or the "go to" button 1414, an application program window 1450 as shown in FIG. 14B would be produced according to one embodiment of the invention. In other words, the user selection was to select the album "The Great Depression" by DMX, namely, the explicit content version. As such, the first subwindow 1402 displays an image 1452 associated with the selected album, information 1454 pertaining to the album, and a "buy album" button 1456. Additionally, since the selected album has explicit content, the first sub-window 1402 can also display a parental advisory warning indication 1457 to alert potential purchasers that the selected album contains explicit content. The first sub-window 1402 can further include top downloads information 1458 and related song purchases information 1460. The second sub-window region 1404 can list those songs on the selected album. As shown in FIG. 14B, the selected album, "The Great Depression" contains seventeen songs or tracks, each of which is identified by an explicit content indicator 1408, thereby indicating that each of the songs or tracks contains explicit content.

[00122] Another aspect of the invention pertains to modification of media descriptors that contain offensive language. For example, media descriptors are often provided as titles to media items, such as albums, songs, videos or pictures. Occasionally, these media descriptors can contain offensive language. Hence, when media items are provided to a media store (or media database) to be stored and thus available for subsequent purchase, these media items can be reviewed to determine whether any offensive language is present within their media descriptors. Alternatively, the review for offensive language in the media descriptors can be done dynamically as these media items are requested by various media players. In either case, the offending portion of the media descriptors can be altered to remove the offensive language.

**[00123]** In one embodiment, each word within each of the media descriptors can be compared with a list of identified offending words stored in a file or database. For each offending word found with a media descriptor, a portion of the offensive word in the media descriptor can be altered through use of replacement characters. As an example, as shown in FIG. 14A, one of the song names (e.g., media descriptors) on the selected album is "Nasty Bitch". However, the song name is displayed as shown

in FIG. 14A with a modified media designator 1416, namely, "Nasty B\*\*\*h". Hence, in this embodiment, the internal characters of the offending word "bitch" were altered and thus replaced with an asterisk. The user knows how many characters were replaced by the number of asterisks and thus is provided with some context for the word even after it has been modified. However, once modified, the offending word is no longer offensive.

**[00124]** Another aspect of the invention pertains to a graphical user interface in which a scrolling type action that permits a user to scroll or flip through media items being displayed in an efficient, user-friendly manner. In one embodiment, a graphical user interface action or control can cause update (or replacement) from a displayed set of media items to a next set of media items. The update can, for example, include a transition effect when transitioning between different sets of media items.

[00125] FIG. 15A is a diagram of an application program window 1500 according to one embodiment of the invention. The application program window 1500 is, for example, produced at a client machine by a media player, such as the media player 108 operating on the client 104 of FIG. 1. The application program window 1500 includes at least one sub-window 1502. Typically, the sub-window 1502 is associated with a category or grouping of media. Within the sub-window 1502 are displayed a plurality of media item representations 1504. As illustrated in FIG. 15A, the sub-window 1502 includes a first media item representation 1504-1, a second media item representation 1504-2, and a third media item representation 1504-3. For each of the media item representations 1504, the sub-window 1502 depicts a text descriptor 1506 and an image descriptor 1508. For example, the text descriptor can be a name that corresponds to the media item, and the image descriptor 1508 can pertain to an image (e.g., artwork) that is associated with the media item. In one embodiment, the image is rather small and thus can be referred to as a "thumbnail" image. In one implementation, the media items are albums of music, and thus the text descriptor 1506 pertains to the title of the album and the image descriptor 1508 pertains to the artwork of the album cover.

[00126] The sub-window 1502 typically displays only a small portion of the total number of media items that correspond to the category or grouping of media associated with the sub-window 1502. As such, the user needs the ability to

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transition to a next set of media items. The application program window 1500 includes next controls 1510 and 1512 to assist the user in transitioning to a next set of media items. The next control 1510 permits the user to transition to the left, and the next control 1512 allows the user to transition to the right. As discussed in more detail below with respect to FIG. 16, the content for the sub-window 1502, either initially or following the selection of one of the next controls 1510 and 1512 is provided by a remote server that stores the media item information that is displayed within the sub-window 1502. For example, the remote server can, in one embodiment, pertain to the media commerce server 102 illustrated in FIG. 1.

[00127] FIG. 15B is a diagram of a window 1520 according to one embodiment of the invention. The window 1520 is, for example, suitable for use as the sub-window 1502 illustrated in FIG, 15A. The window 1520 can also be considered a frame. In any case, the window 1520 includes window (frame) objects that pertain to objects of the window 1520 (frame). As shown in FIG. 15B, the window 1520 includes a display region 1522 and next controls 1524 and 1526. The display region 1522 represents a portion of the window 1520 that displays server-provided information pertaining to a of the media items available from the server. The next controls 1524 and 1526 are used by a user to request a next set of the media items available from the server. In particular, when the next control 1522 is selected, a load window (load frame) request is sent to the server. In one embodiment, the next control 1524 is an object of the window 1520 (frame) and contains information on the next set of the media items as well as a transition effect therefor. The transition effect can have various characteristics and styles that provide an animated transition between the display of a current set of media items and a subsequent set of media items. Although various transition effects can be used, some examples of transition effects are wipe, dissolve, drop-in, etc. Also the transition effect can have an acceleration/deceleration or speed characteristics that can, if provided, control the rate (e.g., speed and/or acceleration) of the transition effect (animation). Even with the transition effect, the new content for the display portion 1522 is display such that the next controls 1524 and 1526 are on top of the display region 1522. In other words, the animation (transition) effect causes the new content for the display portion 1522 to arrive in the display portion 1522 in a manner that is underneath the next controls 1524 and 1526. Similarly, if desired, the boundary of the window 1520 and

the display region 1522 can have a shading effect, such shading effect can be an object of the frame and can also be displayed over top of the display region 1522. The server-provided information in response to the request is, for example, a markup language document (e.g., XML) that describes the layout therefore and its objects as well as contains links for data (e.g., artwork, title) for each of the media items within the set being displayed. In one embodiment, the frame can be displayed like a composite image such that back-to-front with the content for the display region 1522 being in the back and the other possible frame features (objects) being in the front, e.g., the next controls and a shading effect. The window 1520 can also include a position indicator 1528 that informs the user of the relative position within the various media items that are associated with and able to be displayed within the display portion 1522 (see also FIG. 15C).

[00128] FIG. 15C is a screen shot of an application program window 1550 according to one embodiment of the invention. The application program window 1550 represents one implementation of the application program window 1500 illustrated in FIG. 15A.

[00129] The application program window 1550, although produced by an application program, is presented in a network browser style, and thus looks like a web page in many respects. The application program window 1550, among other things, includes a first sub-window 1552, a second sub-window 1554, a third subwindow 1556, and a fourth sub-window 1558. Each of the sub-windows 1552-1558 displays four media items. More particularly, for each media item within each of the sub-windows 1552-1558, media information for each of the four media items is displayed. In one embodiment, for each media item being displayed within one of the sub-windows 1552-1558, the media item information being presented includes an album title 1560, an artist 1562, and album artwork 1564. The different subwindows 1552-1558 represent different groupings or categories that the albums can be arranged in. In FIG. 15C, the exemplary groupings or categories are New Releases, Just Added, Staff Favorites, and Compilations. In one embodiment, each of the sub-windows 1552-1558 pertains to a frame. For example, a frame boundary 1559 surrounds the sub-window 1552.

[00130] Hence, the user can simultaneous view the basic information on four media items (e.g., albums) within each of the sub-windows 1552-1558. However,

when the user desires to view other albums within one of the groups or categories, then the user can select one of the next controls 1566 and 1568. For example, with respect to the first sub-window 1552, the user is able to transition to the left using the next control 1566, or transition to the right using the next control 1568. The other sub-windows 1554-1558 similarly have next controls. Upon the user's selection of the next control 1568, a next set of four albums would be requested from the remote server, and then when received, would be displayed within the first sub-window 1552, thereby replacing the four media items previously displayed therein. The transition from the former set of media items to a next set of media items can be performed with an animated transition such that the user is shown the effect of the transition or scroll to the next set.

**[00131]** Additionally, the application program window 1550 shown in FIG. 15C includes a top song downloads region 1570 and a top albums download region 1572. The top song downloads region 1570 includes a list of the top songs that have been downloaded from the music store that is offering the various media items for purchase. The top albums download region 1572 displays a list of top albums that have been downloaded by users of the music store.

**[00132]** In one embodiment, the set of media data for the associated sub-window is provided in a markup language format. In one example, the markup language format is eXtensible Markup Language (XML) based. In the case where the media items are albums, such as shown in FIG. 15C, the artwork images are thumbnail sized so that the amount of data associated with a set of media data is relatively small and thus easily transmitted over a network from the remote server.

**[00133]** FIG. 16 is a flow diagram of media page processing 1600 according to one embodiment of the invention. The media page processing 1600 is, for example, performed by a media player, such as the media player 108 operating on the client 104 illustrated in FIG. 1. The media page processing 1600 can be performed by an application program to produce an application program window, such as the application program window 1500 illustrated in FIG. 15A and the application program window 1550 illustrated in FIG. 15B.

[00134] The media page processing 1600 is activated whenever a base page is to be presented within an application program window. Once the media page

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processing 1600 begins, a base page is requested 1602 from a remote server. The remote server is, for example, the media commerce server 102 illustrated in FIG. 1. The base page can vary with implementation but has the characteristics shown in FIG. 15A and 15B with respect to a sub-window and next controls.

[00135] A decision 1604 then determines whether the base page has been received from the server. Once the decision 1604 determines that the base page has been received, then the base page is displayed 1606. At this point, the base page is presented on a display screen and includes at least one sub-window and at least one next control.

[00136] Then, a decision 1608 determines whether a next control selection has been made. When the user interacts with the base page to select the next control, then a next control selection has been made. However, the user may interact with the base page in a variety of different ways, including a next control selection or a preview request, or not at all. When the decision 1608 determines that a next control selection has not been made, then a decision 1610 determines whether a preview request has been made. When the decision 1610 determines that a preview request has not been made, then other processing 1612 can be performed and then the media page processing 1600 can return to repeat the decision 1608 and subsequent blocks. Alternatively, when the decision 1610 determines that a preview request has been made, then preview content is requested 1614 from the remote server. A decision 1616 then determines whether the preview content has been received. Once the decision 1616 determines that the preview content has been received, then the preview content is presented 1618. In one embodiment, the presentation 1618 of the preview content causes the preview content to be played. In one example, the preview content is a short audio file that is played by the media player for the benefit of the user. Following the operation 1618, the media page processing 1600 returns to repeat the decision 1608 and subsequent operations.

[00137] On the other hand, when the decision 1608 determines that a next control selection has been made, then a next set of media data for the associated sub-window is requested 1620. A decision 1622 then determines whether the next set of media data has been received. When the decision 1622 determines that the next set of media data has been received, then a next set of media data is presented 1624 in the associated sub-window. Typically, the next set of media data completely

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replaces the previous set of media data residing within the associated sub-window. An animated transition between the prior set of media data and the new set of media data can be performed to facilitate user awareness of the transitioning or updating operation. Following the operation 1624, the media page processing 1600 returns to repeat the decision 1608 and subsequent operations so that additional user interactions can be processed.

[00138] The various aspects, features, embodiments or implementations of the invention described above can be used alone or in various combinations.

[00139] The media items can pertain to audio items (e.g., audio files or songs, such as for music or audiobooks), video items (e.g., video files or movies), or image items (e.g., photos).

**[00140]** The invention is preferably implemented by software, but can also be implemented in hardware or a combination of hardware and software. The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the computer readable medium include read-only memory, random-access memory, CD-ROMs, DVDs, magnetic tape, optical data storage devices, and carrier waves. The computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

**[00141]** The advantages of the invention are numerous. Different embodiments or implementations may, but need not, yield one or more of the following advantages. One advantage of the invention is that purchased media items are able to be securely downloaded to a user's machine. Another advantage of the invention is that media items can be purchased with a single user interface action. Still another advantage of the invention is that media items available for purchase can be searched or browsed in an efficient, user-friendly manner. Yet another advantage of the invention is that media items having offensive content or descriptors can be distinguishably displayed and/or altered to signal the presence of or remove of the offensive matter.

[00142] The many features and advantages of the present invention are apparent from the written description and, thus, it is intended by the appended claims to cover

all such features and advantages of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, the invention should not be limited to the exact construction and operation as illustrated and described. Hence, all suitable modifications and equivalents may be resorted to as falling within the scope of the invention.

What is claimed is:

#### **CLAIMS**

A method for purchasing access to a media item over a network, said method
 comprising:

(a) receiving, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user through a single graphical user interface action by the user once an identifier for the particular media item is displayed on a display screen for the user, and the buy request including an account identifier for the user;

(b) initiating payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user;

(c) determining media access information pertaining to the particular media 15 item; and

(d) sending, over the network, the media access information to a user machine of the user, the media access information thereafter being used by the user machine to access the particular media item.

20 2. A method as recited in claim 1, wherein the payment of the particular media item is a fixed price per media item.

3. A method as recited in claim 1, wherein the media item is one of an audio song, a video, or an audiobook.

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4. A method as recited in claim 1, wherein the media access information includes a URL to a remote storage server that stores the particular media item.

5. A method as recited in claim 4, wherein the media access information further 30 includes a security token and a download key.

6. A method as recited in claim 5, wherein said method further comprises:

(e) retrieving the particular media item from the remote storage server using the URL to locate the particular media item and using the security token to provide authentication.

7. A method as recited in claim 6, wherein said method permits said retrieving
(e) to be repeated until the user machine confirms receipt of the particular media item.

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8. A method as recited in claim 7, wherein the particular media item retrieved from the remote storage server is encrypted.

A method as recited in claim 1, wherein the particular media item retrieved
 from the remote storage server is encrypted with a user key.

10. A method as recited in claim 1,

wherein the media access information further includes a download key,

wherein the particular media item retrieved from the remote storage server is encrypted using the download key, and

wherein said method further comprises:

(e) retrieving the particular media item from the remote storage server;

(f) decrypting the particular media item using the download key;

(g) re-encrypting the particular media item with a user key; and

25 (h) storing the particular media item to local storage following said reencrypting (g).

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# PAGE 000302

11. A method as recited in claim 1,

wherein the media access information further includes a download key,

wherein the particular media item retrieved from the remote storage server is encrypted using the download key, and

wherein said method further comprises:

(e) retrieving the <sup>1</sup> particular media item from the remote storage server;

(f) transcrypting the particular media item using the download key and a user key; and

(g) storing the particular media item to local storage following said transcrypting (f).

12. A method as recited in claim 1, wherein said sending (d) is prevented from being performed when the payment of the particular item is flagged as having a problem.

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13. A method as recited in claim 1, wherein the particular media item is an audio file and/or a video file.

14. A method as recited in claim 1, wherein the particular media item is a group of20 audio files.

15. A method as recited in claim 14, wherein the group of audio files pertains to a playlist or an album.

25 16. A method as recited in claim 1, wherein the buy request requests to buy a group of particular media items.

17. A computer readable medium including at least computer program code for purchasing access to a media item over a network, said computer readable medium comprising:

computer program code for receiving, over the network, a buy request from a user requesting to buy a particular media item, the buy request being initiated by the user, the buy request including an identifier for the particular media item and an account identifier for the user;

computer program code for initiating payment for the particular media item being purchased in response to the buy request being received, the payment being processed using information previously stored in a user account associated with the user;

computer program code for determining media access information pertaining to the particular media item; and

computer program code for sending, over the network, the media access
 information to a user machine of the user, the media access information thereafter
 being used by the user machine to access the particular media item.

18. A computer readable medium as recited in claim 17, wherein said computer readable medium further comprises:

20 computer program code for retrieving the particular media item from the remote storage server using the URL to locate the particular media item and using the security token to provide authentication.

A computer readable medium as recited in claim 18, wherein said computer
 program code for retrieving can be repeated until the user machine confirms receipt of the particular media item.

20. A computer readable medium as recited in claim 17, wherein the payment of the particular media item is a fixed price per media item.

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21. A computer readable medium as recited in claim 17, wherein the media item is one of an audio song, a video, or an audiobook.

22. A network-based media purchase system, said system comprising:

a plurality of client media player programs, each of said client media player programs being resident on a different client machine;

a media storage server that stores media items in an encrypted format; and

a media commerce server that enables each of said client media player programs to purchase media items by enabling the client media player programs to initiate payment for such, to download the media items that have been purchased, to modify encryption imposed on the media items, to store the media items to the client machines, and to subsequently use the stored media items.

23. A network-based media purchase system as recited in claim 22, wherein said media commerce server further enables each of the client media player programs to purchase media items by enabling the client media player programs to receive access information from said media commerce server, at least a first part of the media access information being used to decrypt the media items from their encrypted format.

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24. A network-based media purchase system as recited in claim 23, wherein at least a second part of the media access information is used to locate the media items at said media storage server.

25 25. A network-based media purchase system as recited in claim 22, wherein each of the media player programs produce a graphical user interface on the corresponding client machine, the graphical user interface including at least a first window and a second window.

26. A network-based media purchase system as recited in claim 25, wherein the first window displays first information provided remotely by said media commerce server in a browser-like manner, and wherein the second window displays second information in an application-like manner, the second information being provided locally by the client media player program operating on the corresponding client

machine or being provided remotely by said media commerce server.

27. A network-based media purchase system as recited in claim 26, wherein the second window displays a list of available media items that are associated with at least one criteria.

28. A network-based media purchase system as recited in claim 27, wherein each item in the displayed list of media items has a buy button, and wherein selection of the buy button causes the selected media item to purchased.

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29. A network-based media purchase system as recited in claim 27, wherein selection of one of the items in the displayed list of media items causes the graphical user interface to display an image associated with the selected media item.

20 30. A network-based media purchase system as recited in claim 29, wherein the selected media item is a song, and the image associated therewith is an album cover image for an album including the song.

31. A network-based media purchase system as recited in claim 27, wherein any
of the available media items in the displayed list of media items can be previewed on request by a graphical user interface action.

32. A network-based media purchase system as recited in claim 22,

wherein each of the media player programs produce a graphical user interface having at least a list of available media items that are associated with at least one criteria, and

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wherein any of the available media items in the displayed list of media items can be previewed on request by a graphical user interface action.

33. A network-based media purchase system as recited in claim 32, wherein each item in the displayed list of media items has a buy button, and wherein selection of the buy button causes the selected media item to purchased with no other required user interaction other than possibly a single user interface action to acknowledge a purchase confirmation message.

34. A network-based media purchase system as recited in claim 32, wherein any
of the available media items in the displayed list of media items can be previewed
without having an account with said media commerce server.

35. A network-based media purchase system as recited in claim 26, wherein the second window displays a list of available media items that are available for purchase and are associated with at least one criteria.

36. A network-based media purchase system as recited in claim 35, wherein the at least one criteria can be provided via the graphical user interface through browsing, sorting or searching the media items that are available for purchase.

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37. A network-based media purchase system as recited in claim 35, wherein selection of one of the items in the displayed list of media items causes the graphical user interface to display an image associated with the selected media item.

38. A network-based media purchase system as recited in claim 37, wherein the selected media item is a song, and the image associated therewith is an album cover image for an album including the song.

5 39. A network-based media purchase system as recited in claim 37, wherein any of the available media items in the displayed list of media items can be previewed on request by a graphical user interface action.

40. A network-based media purchase system as recited in claim 39, wherein any
10 of the available media items in the displayed list of media items can be previewed
without having an account with said media commerce server.

41. A network-based media purchase system as recited in claim 22, wherein after the media items have been stored to the client machines, the media items can be
15 decrypted and presented at the client machines.

42. A network-based media purchase system as recited in claim 41, wherein the media items are presented at the client machines by playing the media items.

20 43. A network-based media purchase system as recited in claim 42, wherein the media items are audio and/or video files.

44. A network-based media purchase system as recited in claim 41, wherein the media items can only be presented at the client machines that are authorized to
25 present the particular media items.

45. A network-based media purchase system as recited in claim 22, wherein the client machines can operatively connect to said media commerce server and said media storage server via a network.

46. A network-based media purchase system as recited in claim 45, wherein the network includes at least a portion of the Internet.

5 47. A network-based media purchase system as recited in claim 22, wherein the client machines can operatively connect to said media commerce server and said media storage server via a network, and wherein the client media player programs communicate with said media storage server and said media commerce server via the network.

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48. A network-based media purchase system as recited in claim 22, wherein said network-based media purchase system enables users of the client media player programs to establish accounts with said media commerce server so that media items can be purchased.

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49. A network-based media purchase system as recited in claim 48, wherein said media commerce server maintains a purchase history for each of the users of the client media player programs that have established accounts with said media commerce server.

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50. A network-based media purchase system, said system comprising:

a plurality of client media player programs, each of said client media player programs being resident on a different client machine;

a media storage server that stores media items in an encrypted format; and

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a media commerce server that enables each of said client media player programs to purchase media items by enabling one of said client media player programs to specify at least one media item to purchase and to initiate payment for the purchase, encrypting the at least one media item particular for a user account or user associated with the one of said client media player programs, and downloading and storing the at least one media item that has been encrypted to the client machine operating the one of said client media player programs.

51. A network-based media purchase system as recited in claim 50, wherein the
5 media items can only be presented at the client machines that are authorized to
present the particular media items.

52. A network-based media purchase system as recited in claim 50, wherein said network-based media purchase system enables users of the client media player programs to establish accounts with said media commerce server so that media items can be purchased.

53. A network-based media purchase system as recited in claim 50, wherein said media commerce server permits subsequent downloading of the media items that
15 have been purchased until the corresponding client player program confirms receipt of the media items that have been purchased.

54. A network-based media purchase system as recited in claim 50, wherein said media commerce server enables each of said client media player programs to purchase the media items at a fixed price per media item.

55. A network-based media purchase system as recited in claim 50, wherein the media items are audio songs.

25 56. A network-based media purchase system as recited in claim 50, wherein the media items are groups of audio songs.

57. A network-based media purchase system as recited in claim 50, wherein the media items are one or more of audio songs, videos, audiobooks.

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58. A method for processing an electronic payment for an online purchase, said method comprising:

receiving purchase information for an online purchase made by a user;

deferring processing of electronic payment for the online purchase;

accumulating the purchase information for the online purchase together with one or more other online purchases of the user being deferred;

determining whether a deferral limit for the online purchases of the user being deferred has been reached; and

10 initiating an aggregate electronic payment transaction for the online purchases being deferred after said determining determines that the deferral limit has been reached.

59. A method as recited in claim 58, wherein the deferral limit is based on at least 15 one deferral criteria.

60. A method as recited in claim 59, wherein the deferral criteria includes at least one of a number of online purchases, a time duration, or an amount of the online purchases being deferred.

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61. A method as recited in claim 58, wherein the deferral limit is reached once the aggregated cost of the online purchases being deferred exceeds a threshold cost amount, or once a deferral time threshold is exceeded.

25 62. A method as recited in claim 58, wherein the user has a user account, and wherein the user pertains to any authorized user of the user account.

63. A method as recited in claim 62, wherein the deferral limit is dependent on the user or user account.

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64. A computer readable medium including at least computer program code for processing an electronic payment for an online purchase, said computer readable medium comprising:

5 computer program code for receiving purchase information for an online purchase made by a user;

computer program code for deferring processing of electronic payment for the online purchase;

computer program code for accumulating the purchase information for the
 online purchase together with one or more other online purchases of the user being deferred;

computer program code for determining whether a deferral limit for the online purchases of the user being deferred has been reached; and

computer program code for initiating an aggregate electronic payment
 15 transaction for the online purchases being deferred after said determining
 determines that the deferral limit has been reached.

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## METHOD AND SYSTEM FOR NETWORK-BASED PURCHASE AND DISTRIBUTION OF MEDIA

# BACKGROUND OF THE INVENTION

Methods and systems for network-based purchase and distribution of media are disclosed. The purchase and distribution of media by these methods and systems are not only secure but also controlled. The security restricts access to media within media files during downloads as well as while stored at a server and/or client. For example, a potential purchaser can search and browse through numerous media items on-line that are available for purchase. The potential purchaser can thereafter purchase one or more media items on-line with great ease. Upon purchasing a media item, the content for the media item can be downloaded over the network to the purchaser. The content for the media item is then encrypted

15 for the purchaser's use and stored on the purchaser's machine. Thereafter, the purchaser can make use of the media item (e.g., play the media item). Improved graphical user interfaces suitable for reviewing, browsing, previewing and/or purchasing numerous media items are also disclosed.

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FIG. 1



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FIG. 2B



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FIG. 3



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FIG. 4



FIG. 5A



FIG. 5B

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**FIG.** 6





FIG. 7A

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FIG. 7B



**FIG. 8**






FIG. 10



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FIG. 11C





**FIG. 12B** 



FIG. 13A



FIG. 13B

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FIG. 14B



## FIG. 15A

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FIG. 16