



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

September 10, 2010

Dr. Sanjay K. Jha
Chief Executive Officer
Motorola SpinCo Holdings Corporation
600 North US Highway 45
Libertyville, Illinois 60048

**Re: Motorola SpinCo Holdings Corporation
Amendment 1 to Form 10
Filed August 31, 2010
File No. 001-34805**

Dear Dr. Jha:

We have reviewed your amended Form 10 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

The Separation, page 39

1. We note your response to comment 11 in our letter dated July 28, 2010. Please revise to clarify that you are discussing all material factors in the decision process.

Material U.S. Federal Income Tax Consequences of the Distribution, page 43

2. We note your response to comment 13 in our letter dated July 28, 2010. Please revise to state counsel's opinion with respect to the tax implications of the proposed spin-off to shareholders.

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Management, page 65

3. We note that you have added several individuals to your “Management” discussion. Please revise to file all employment agreements as exhibits to your filing for the named executive officers.

Compensation Discussion and Analysis, page 71

4. We note your response to comment 16 in our letter dated July 28, 2010. With respect to your annual incentive plan disclosure, please further revise to indicate whether you or Motorola, Inc. bears the burden for these awards. If responsibility for payment has not been determined, please so state.

Agreements with Motorola, Inc., page 122

5. We note your response to comment 18 in our letter dated July 28, 2010. To the extent practicable, please revise to provide an estimate of amounts payable to Motorola, Inc. pursuant to the “Other Commercial Agreements” that you expect to enter into.

Notes to Condensed Combined Financial Statements, page F-45

Note 3. Other Financial Data, page F-51

6. Explain for us in more detail how you determined the gain of \$228 million related to the settlement of outstanding litigation. Tell us how you accounted for the patents you exchanged. In addition, tell us how you reflected the settlement in your statement of cash flows.

Note 5. Income Taxes, page F-56

7. Explain for us in more detail the nature of the settlements with tax authorities that resulted in a reduction of your unrecognized tax benefits by \$100 million. Tell us why you recognized \$10 million as a tax benefit net of valuation adjustments and \$25 million as a reduction of tax carry forwards. Clarify how you recorded the remaining reduction of \$65 million. You may wish to provide us with journal entries to illustrate your accounting for this transaction.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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You may contact Melissa Hauber, Staff Accountant, at 202-551-3368 or Bob Littlepage, Accountant Branch Chief, at 202-551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact Jonathan Groff, Staff Attorney, at 202-551-3458 or me at 202-551-3810 with any other questions.

Sincerely,

/s/ Paul Fischer for
Larry Spirgel
Assistant Director

cc: Via facsimile to (847) 576-3628
Carol Forsyte, Esq.